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ABSTRACT

Prepared under the auspices of the National Business Council for Consumer Affairs by its Sub-Council on Product Safety, this report is part of a program to advise the federal government on voluntary activities by the business community which would help consumers. Contents include analysis, conclusions and recommendations relating to manufacturers, retailers, voluntary standards organizations, product testing laboratories, trade associations, and government under the topics of (1) The Manufacturer's Role, (2) Product Safety Standards, (3) The Retailer's Role; and (4) Public Safety Awareness. Particular emphasis is given to those private sector activities which relate to effective operation of the new Consumer Product Safety Commission established by the Consumer Product Safety Act enacted by the Congress late in 1972. The text of the act is provided in the appendix. The 14 recommendations presented throughout this report relate to those actions concerning product safety which ought to be considered by all parts of the economy, particularly the corporate sector. (WL)

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ED130028

Safety in the Marketplace

A Program for the Improvement of Consumer Product Safety

April 1973

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EDUCATION & WELFARE
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Deputy Director
National Business Council for
Consumer Affairs
U. S. Department of Commerce

Honorable Frederick B. Dent
Secretary of Commerce
Washington, D.C. 20230

Dear Secretary Dent:

Since the establishment of the National Business Council for Consumer Affairs by President Nixon on August 5, 1971, its Sub-Council on Product Safety has been examining the problem of consumer product safety in an attempt to identify actions which might reduce accidents and injuries. This work has resulted in the attached report entitled, "Safety in the Marketplace; A Program for the Improvement of Consumer Product Safety," which is hereby submitted for your consideration.

Virtually all of the recent studies and dialogue on consumer product safety have centered upon the legislative issues relating to the recently enacted Consumer Product Safety Act. The Sub-Council recognizes the importance of this Federal action and its report focuses on private sector activities important to the operation of the new Product Safety Commission, as well as those which should be strengthened regardless of the form and magnitude of the Federal role in this area. Thus, the report contains analysis, conclusions, and recommendations relating to manufacturers, retailers, voluntary standards organizations, product testing laboratories, and trade associations, as well as government and other organizations in a position to contribute to improved product safety.

The issues covered in the report are complex and often technical, but we believe they should be understood by all concerned with product safety. We therefore recommend that the report be given wide distribution within the government and in the private sector.

Respectfully submitted,

Robert E. Brooker

Robert E. Brooker, Chairman
National Business Council
for Consumer Affairs

Ruth Handler

Ruth Handler, Chairman
Sub-Council on Product Safety

Stanley C. Gault

Stanley C. Gault, Vice-Chairman
Sub-Council on Product Safety

Summary

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I. Background

The National Commission on Product Safety has estimated that 20 million injuries occur each year in and about the household. Individuals, products, and their environment, are all involved in these accidents, and the contributing factors are varied and complex. As a result, dramatic reductions in injury rates cannot be expected from any single action. However, incremental improvements over time are possible, and they constitute a worthwhile national goal. Many institutions are in a position to contribute to this end, including corporations, trade associations, technical organizations, and government agencies.

II. The Manufacturer's Role

Manufacturers have the responsibility to assure that the safety of the product is taken into account throughout the activities involved in its design, production, and distribution. This is best accomplished by a comprehensive systems approach to product safety, which includes every step from the creation of a product design to the ultimate use of the product by the customer. To assure that this system is effective:

19 **RECOMMENDATION 1**

CORPORATIONS WHICH MANUFACTURE CONSUMER PRODUCTS SHOULD MAINTAIN AND ENFORCE WRITTEN SAFETY POLICIES, STANDARDS, AND PROCEDURES ON ALL PERTINENT CORPORATE ACTIVITIES. THESE DOCUMENTS SHOULD BE REGULARLY REVIEWED AND UPDATED.

These procedures should include the establishment of a broadly based internal safety review council and should provide guidelines for product design, testing, quality assurance, and product identification procedures.

Insurance companies can assist manufacturers in creating and maintaining the policies and procedures required for adequate product safety. This would be especially meaningful for those manufacturers with limited technical staffs. Therefore:

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RECOMMENDATION 2 20

INSURANCE COMPANIES OFFERING PRODUCT LIABILITY COVERAGE SHOULD DEVELOP TECHNIQUES TO ASSIST THEIR CORPORATE CLIENTS IN ESTABLISHING EFFECTIVE PRODUCT SAFETY PRACTICES.

This independent and confidential review of clients' procedures by insurance companies would be a helpful check on their adequacy from a safety point of view and could complement advice and assistance from other sources, such as independent laboratories, safety consultants, universities, and government agencies.

Manufacturers also can contribute to the safe use of their products by emphasizing safety in the wide range of information services provided to customers. Because advertising (including packaging and display materials) is often the most pervasive corporate contact with the consumer:

RECOMMENDATION 3 24

ALL ADVERTISERS SHOULD REVIEW THE CONTENT OF THEIR MESSAGES FOR SAFETY IMPLICATIONS

III. Product Safety Standards

Voluntary product standards have been a basic part of the American industrial system for over 100 years. They unify design criteria and terminology, increase the compatibility of products with intended consumer uses, and allow efficiency in production and marketing. In addition, voluntary standards form the basis for most mandatory standards issued by government.

To be effective, product safety standards should be developed from meaningful data which points to their need. Gathering this data is an expensive and complicated task, and the Federal government is the appropriate institution to do it. A start has been made toward the creation of this Federal product injury data system, and the recently passed Consumer Product Safety Act requires the Consumer Product Safety Commission to operate an injury information clearinghouse.* This is a significant tool in guiding national safety decisions, therefore:

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* Section 5, P.L. 92–573 (See Appendix).

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32 **RECOMMENDATION 4**

THE CONSUMER PRODUCT SAFETY COMMISSION SHOULD PLACE HIGH PRIORITY ON THE COMPLETION OF A COMPREHENSIVE NATIONAL PRODUCT INJURY DATA SYSTEM TO GUIDE THE IDENTIFICATION AND EVALUATION OF PREVENTIVE MEASURES.

The resulting system should be designed and operated to serve the entire nation, and all interested sectors should participate in its evolution. Therefore:

32 **RECOMMENDATION 5**

AN ADVISORY COMMITTEE ON PRODUCT INJURY DATA SHOULD BE ESTABLISHED WITHIN THE CONSUMER PRODUCT SAFETY COMMISSION, INCLUDING MEMBERSHIP FROM FEDERAL AND NON-FEDERAL GOVERNMENTAL UNITS, THE PRIVATE SECTOR, AND THE PUBLIC.

The regular, open review which such an advisory committee would make possible would help to identify problems and improvements which would contribute to the effectiveness of the system.

In addition to the Federal government, private sector institutions should become involved in the analysis of product injury data, and act upon it. For the industrial sector:

33 **RECOMMENDATION 6**

TRADE AND PROFESSIONAL ASSOCIATIONS ACTIVE IN CONSUMER PRODUCT INDUSTRIES SHOULD ANALYZE RELATED PRODUCT INJURY DATA TO DETERMINE CAUSES, IDENTIFY PREVENTIVE MEASURES, AND COORDINATE RESPONSIVE ACTION.

These associations can also provide the other types of information needed to identify and evaluate preventive measures, such as cost-benefit and impact analyses.

A variety of organizations can participate in the creation of voluntary standards based upon product injury data, including professional societies, trade associations, and product testing organizations. Some standards relate specifically to safety alone, and can be treated with the importance they deserve. Many more standards relating to other product characteristics have a subtle but important bearing on product safety. Thus, the entire standards system needs attention, and this points to the American National Standards Institute (ANSI), which is the orga-

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nization designed to coordinate the U.S. voluntary standards system.

ANSI is an established, broadly based organization, but its budget is limited and it lacks the support necessary to assume a strong leadership role in the voluntary standards system. Only a small percentage of the corporations which benefit from ANSI pay directly for its services, therefore:

RECOMMENDATION 7 42

THE AMERICAN NATIONAL STANDARDS INSTITUTE SHOULD SEEK NEW FINANCIAL SUPPORT ARRANGEMENTS WITH THE ORGANIZATIONS IT SERVES TO PROVIDE ADEQUATE FUNDS FOR MANAGEMENT AND COORDINATION OF THE NATIONAL VOLUNTARY STANDARDS SYSTEM. CORPORATIONS AND TRADE ASSOCIATIONS SHOULD SUPPORT THIS EFFORT.

With proper support, ANSI could pay for direct consumer representation in the standards-making process, and could upgrade voluntary standards-writing procedures generally. In addition to greater corporate support:

RECOMMENDATION 8 45

FEDERAL AGENCIES WITH NEEDS AND RESPONSIBILITIES RELATED TO VOLUNTARY PRODUCT STANDARDS SHOULD JOIN THE AMERICAN NATIONAL STANDARDS INSTITUTE.

Federal agencies with missions related to voluntary standards now participate in hundreds of ANSI activities. These agencies should also become paying members. Eventually, ANSI should be reinstituted as a quasi-public organization with a Federal charter to enhance its ability to manage the nation's voluntary standards system and carry out its important international standards responsibilities.

Within corporations, standards activities often are left at a non-policy level, and rarely are visible to top management. Since product standards, particularly as they relate to safety, are becoming major national issues:

RECOMMENDATION 9 46

SENIOR CORPORATE MANAGERS SHOULD REGULARLY REVIEW STANDARDS ACTIVITIES AND SHOULD INVOLVE THEIR CORPORATIONS IN INDUSTRY, NATIONAL, AND INTERNATIONAL STANDARDS ACTIVITIES.

Top management support and involvement in the standards process will be essential if the corporation is to participate properly in the many new activities associated

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with establishing and complying with emerging standards.

Trade associations should have a major role in the development of product standards, and this will become particularly apparent when the Federal data system and safety standards-making process reach full operational status. The Federal government will not be able to work separately with all companies within an industry in the development of standards and a system is needed to consolidate industry contributions, therefore:

47 **RECOMMENDATION 10**

TRADE ASSOCIATIONS SHOULD GIVE PRIORITY TO INDUSTRY-WIDE VOLUNTARY STANDARDS ACTIVITIES RELATING TO THE SAFETY OF CONSUMER PRODUCTS.

In carrying out this responsibility, associations may create internal committees or they may turn to other organizations more experienced in writing product standards. Ideally, all throughout, the process should be open to public participation.

Product certification is often used to signify and assure compliance with voluntary or mandatory standards. There are many effective certification systems, but there is a need for national coordination of these efforts. Therefore:

54 **RECOMMENDATION 11**

THE AMERICAN NATIONAL STANDARDS INSTITUTE SHOULD PROVIDE THE COORDINATION AND PLANNING NECESSARY TO IMPROVE AND EXPAND VOLUNTARY PRODUCT CERTIFICATION SYSTEMS.

This program should establish standards for the various kinds of certification and it should make available, under appropriate arrangements, a nationwide seal indicating compliance with ANSI standards.

An increase in the use of product certification systems might create the need for a national system for laboratory accreditation which will assure the competence of product testing laboratories. Therefore:

55 **RECOMMENDATION 12**

THE SECRETARY OF COMMERCE SHOULD INITIATE ACTION TO EVALUATE THE MERITS OF ESTABLISHING A QUASI-PUBLIC NATIONAL TESTING LABORATORY ACCREDITATION BOARD.

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If created, this board should include government, corporate, professional, and consumer representative appointees and it should set the policies required to administer an effective testing laboratory accreditation program.

IV. The Retailer's Role

In selecting products for sale to the public, retailers act as "consumers' buying agents" and they have the responsibility to obtain only safe products. As part of this selection process they should make certain that imported products meet the same safety standards which apply to domestic products. Therefore:

RECOMMENDATION 13 57

DISTRIBUTORS AND RETAILERS OF CONSUMER PRODUCTS HAVE THE RESPONSIBILITY TO ASSURE THAT THEIR PURCHASING PERSONNEL UNDERSTAND APPLICABLE MANDATORY AND VOLUNTARY SAFETY STANDARDS, AND THEIR SUPPLIERS' COMPLIANCE POLICIES.

Permanent training procedures are the best means to achieve this objective. In addition, distributors, trade associations, and other organizations can assist in providing the necessary information for retail employees.

V. Public Safety Awareness

Product safety information arises from a wide variety of sources and reaches consumers through several basic channels. This process has been characterized by diversity and lack of national focus. Resources and priorities should be concentrated on well organized major campaigns with the repeated impact needed to influence consumer behavior. The National Safety Council has been the national focus for programs of this type for nearly 60 years, and the Sub-Council therefore recommends:

RECOMMENDATION 14 61

THE NATIONAL SAFETY COUNCIL SHOULD CREATE AND COORDINATE A COMPREHENSIVE PRODUCT SAFETY COMMUNICATIONS PROGRAM FOR CONSUMERS.

This program deserves the complete support of businesses and their associations, and of government agencies at all levels concerned with public safety.

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Foreword

This report has been prepared under the auspices of the National Business Council for Consumer Affairs, which was established by Executive Order by President Nixon on August 5, 1971 to advise the Federal government on voluntary activities by the business community which would benefit consumers. The Council is composed of over 100 business leaders, and it receives administrative and staff support from the U.S. Department of Commerce.

At its first session on August 5, 1971, the Council created seven working Sub-Councils covering a broad range of consumer issues including advertising, packaging, warranties, credit, product safety, servicing, and complaints. This report has been prepared by the Sub-Council on Product Safety.

The mission statement adopted by the Council places emphasis upon "activities which assure value, satisfaction and safety in the goods and services provided to consumers." Specifically, this includes an attempt to "identify and examine existing and potential consumer problem areas; seek pragmatic solutions; develop programs benefiting consumers; and advise the Federal government whenever appropriate." Within this framework, the Sub-Council on Product Safety selected the following guidelines for its work:

- 1. Identify and encourage industry standards and programs which assure the highest reasonable degree of consumer safety with respect to products available in the marketplace.
- 2. Serve consumers by anticipating potential product safety problems and by leading in programs of corrective action.
- 3. Help establish closer cooperation between members of industry and government concerned with product safety.

Improved product safety results only when actual changes are made in products, in the ways in which consumers use them, or in the environment in which they are used. For any given product, these factors are generally determined by practices and systems which involve a wide variety of organizations, most of which reside in the private sector. As a result, this report focuses primarily on the major non-government institutions which relate to consumer product safety in an attempt to identify and recommend steps which will improve and strengthen them to the benefit of the nation's consumers.

"Improved product safety results only when actual changes are made in products, in the ways in which consumers use them, or in the environment in which they are used."

Particular emphasis is given to those private sector activities which relate to effective operation of the new Consumer Product Safety Commission established by the Consumer Product Safety Act enacted by the Congress late in 1972. The text of the Act is provided in the Appendix.

References in the text to the new Consumer Product Safety Act are for convenience only and are not intended as interpretations. Footnotes refer to the specific sections of the Act which apply.

The Sub-Council has excluded from consideration many products regulated by the Federal government, particularly foods, drugs, and automobiles. For the remaining range of consumer goods, the Sub-Council established committees on data, standards, certification, and communications as they relate to the safety of consumer products. The individuals who served on the committees are listed in Exhibit 1.

The Sub-Council has attempted to reach conclusions and recommend action acceptable to all members. This report, therefore, represents a general consensus of the members, but all statements included are not necessarily supported by all members with the same degree of conviction.

Most reports which discuss product safety appeal only to a narrow, usually technical, audience. This report seeks wider attention, on the premise that product safety should be of vital concern to decision makers in all sectors of the nation's economic, social, and political life. Meaningful responses to the complex problems involved can come only from informed leadership and the following chapters are designed to contribute to this understanding.

Exhibit I

Committee on Product Safety Standards

A. M. Anderson, *Chairman*
General Manager, Home Laundry Products Division
General Electric Company

Charles F. Williams
Vice President, Product Safety & Quality Assurance
Mattel Toys, a division of Mattel, Inc.

Joseph F. Hutchinson
Vice President, Product Quality & Safety
Goodyear Tire & Rubber Company

Stanley Groner
Vice President
AMF, Incorporated

Joseph L. Barach
Manager, Program Evaluation & Administration
Celanese Corporation of America

David Ward
Assistant Secretary
Owens-Illinois, Inc.

David M. Lilly
Chairman
Toro Corporation

Committee on Product Safety Data

Donald W. King, *Chairman*
Vice Chairman
Westat, Inc.

Robert W. Pratt
Manager, Business Research & Forecasting Operations
General Electric Company

Victor Cole
Vice President, Marketing
Mattel Toys, a division of Mattel, Inc.

Richard Pennington
Secretary-P.S.D.
Insurance Company of North America

C. J. O'Donovan, M.D.
Vice President, Research & Medical Affairs
Miles Laboratories, Inc.

Joseph A. Kosh
Director, Corporate Test Center
AMF, Incorporated

Committee on Product Safety Communications

Spencer C. Boise, *Chairman*
Vice President, Corporate Affairs
Mattel, Inc.

Charles Jolly
Director of Legislative Affairs
Miles Laboratories, Inc.

Ross Garrett
Director, Staff Marketing Services
3M Company

R. C. Johns
Director of Public Relations
Levi Strauss & Company

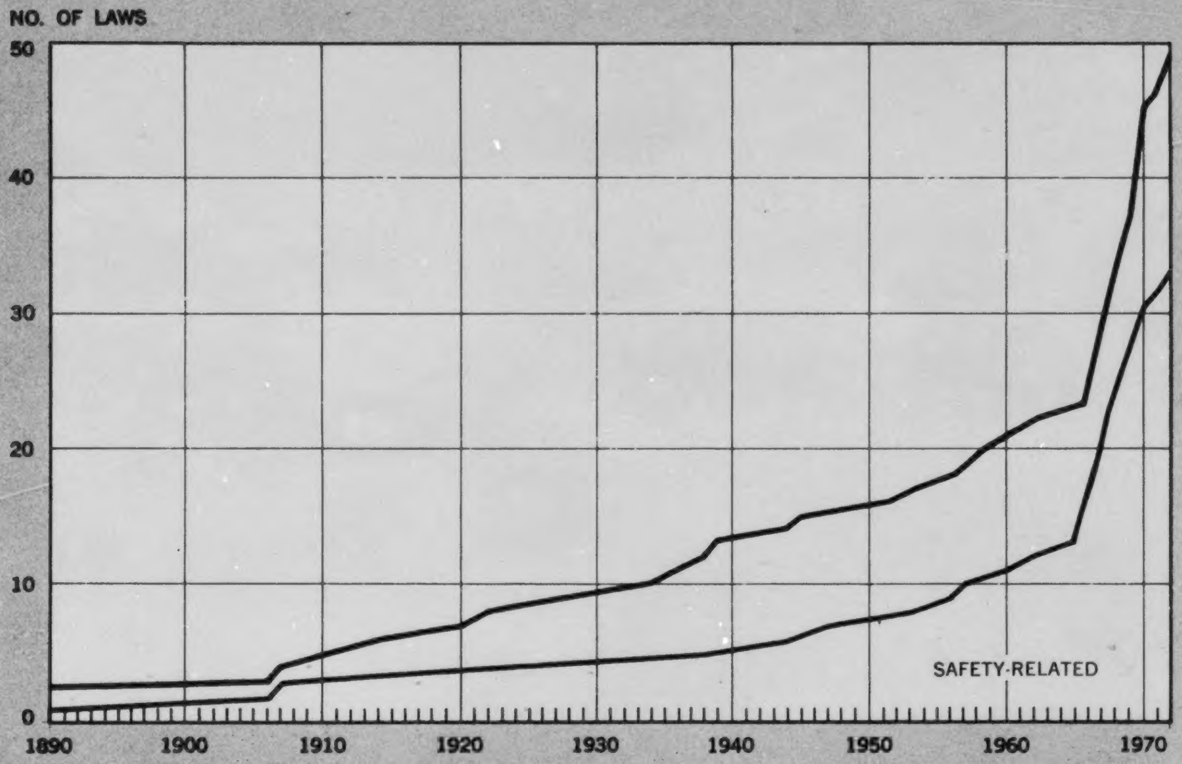
J. K. Paquette
Vice President and Director of Corporate Relations
Owens-Illinois, Inc.

Daryl F. Grisham
President
Parker House Sausage

James McCrory
Director of Government Affairs
Borden, Inc.

EXHIBIT II

Federal Consumer Protection Laws
1890-1972



FEDERAL CONSUMER PROTECTION LAWS 1890-1972

1. Sherman Anti-Trust Act (1890)
2. Meat Inspection Acts (1890, 1906, 1907)
3. Clayton Act (1914)
4. Federal Trade Commission Act (1914)
5. Federal Power Act (1920)
6. Packers and Stockyard Act (1921)
7. Federal Communications Commission of 1934
8. Securities Exchange Act of 1934
9. Robinson-Patman Act (1936)
10. Food, Drug and Cosmetic Acts (1938)
11. Wool Products Labeling Act of 1939
12. Public Health Service Act (1944)
13. Federal Insecticide, Fungicide and Rodenticide Act (1947)
14. Fur Products Labeling Act (1951)
15. Flammable Fabrics Act (1953)
16. Refrigerator Safety Act (1956)
17. Poultry Products Inspection Act (1957)
18. Textile Fiber Products Identification Act (1958)
19. Federal Hazardous Substances Labeling Act (1960)
20. Kefauver Act (Drugs) (1962)
21. Federal Cigarette Labeling and Advertising Act (1965)
22. Child Protection Act of 1966
23. Fair Packaging and Labeling Act (1966)
24. National Traffic and Motor Vehicle Safety Act of 1966
25. Highway Safety Act of 1966
26. Wholesome Meat Act (1967)
27. Flammable Fabrics Act Amendment (1967)
28. National Commission on Product Safety Act (1967)
29. Wholesome Poultry Products Act (1968)
30. Consumer Credit Protection Act (1968) (Truth-in Lending)
31. Radiation Control for Health and Safety Act of 1968
32. Fire Research and Safety Act of 1968
33. Natural Gas Pipe Line Safety Act of 1968
34. Child Protection and Toy Safety Act of 1969
35. Public Health Cigarette Smoking Act of 1969
36. Securities Investor Protection Act of 1970
37. Comprehensive Drug Abuse Prevention and Control Act of 1970
38. Egg Products Inspection Act (1970)
39. Fair Credit Reporting Act of 1970
40. Postal Reorganization Act (1970) (covers unordered merchandise)
41. Poison Prevention Packaging Act of 1970
42. Lead-Based Paint Poison Prevention Act (1970)
43. Occupational Safety and Health Act of 1970
44. Federal Boat Safety Act (1971)
45. Drug Listing Act of 1972
46. Motor Vehicle Information and Cost Savings Act (1972)
47. Consumer Product Safety Act of 1972

I. Introduction

Public safety has been a national issue throughout most of the history of the United States. Transportation, housing, construction, and foods were dominant among the earliest concerns. In the early stages of growth of the producing-consuming economy, the experience of using products naturally led to the gradual adoption of standard ways of making and using them. These practices evolved into written standards which were adopted by most manufacturers. As the system developed further, many standards which governed the safety of products were judged to be critical enough to the public interest that they were enacted into law, thus making compliance mandatory instead of voluntary. This evolution is continuing today. Most of the resulting control takes the form of state and local laws, ordinances, and regulations, usually based on standards previously created and adopted within the private sector.

While it has always been a factor, in recent years the Federal role in product safety has become more and more important. Well over half of the existing Federal consumer protection statutes involve safety and the proportion continues to rise, as shown in Exhibit 2.

One of the most significant recent legislative actions on consumer product safety was the establishment by Congress in 1967 of the National Commission on Product Safety.

The Commission reported data that indicated that in the United States individuals suffer 20,000,000 injuries per year in and about the household, including 110,000 permanent disabilities and 30,000 deaths. In these records, involvement in any injury does not necessarily mean that the product was a prime cause of the mishap.

The Commission completed its report in 1970 and recommended a sweeping program of Federal regulation of the safety of all consumer products. In late 1972 the Congress of the United States passed, and the President signed, legislation creating a new Consumer Product Safety Commission to carry out this objective. In the Sub-Council's view, the creation of this new Commission renders the conclusions and recommendations presented in this report even more significant since they relate directly to many of the private sector activities relied upon in the standards-setting procedures established in the Commission's enabling legislation. As such, the report sets a pattern for constructive action. It is intended as a guide for all who are concerned with improving consumer safety.

The recommendations presented throughout this report relate to those actions concerning product safety which ought to be considered by all parts of the economy, particularly the corporate sector. This is based largely on the conclusion that the preponderance of technical and administrative expertise related to consumer product safety is in the private sector in the hundreds of thousands of businesses which manufacture, distribute, sell, or service consumer goods, and the many other private organizations equipped to act on this problem.

The current issues which relate to product safety are highly complicated. As stated in the report of the National Commission on Product Safety:

> "There are those who believe that safety, like charity, begins at home in the behavior of the family—steadying ladders, storing knives, supervising children. Others believe that safety begins with the home itself, the environment where hazardous products find their uses—good lighting, well-insulated wiring, slipproof bathtubs and rugs, latched cabinets for medicine and household chemicals. A third view is that safety begins in the factory and involves design, construction, hazard analysis, and quality control.

None of these views is wholly right or wrong. The classical concept of epidemiology counts all three factors: host, environment, and agent. Close examination of the three uncovers many subsidiary factors: hosts of different capacities and habits; differing social, political, and psychological as well as physical environments; and agents acting in combination, additively, or serially."

In this complex setting, where should the priorities for action lie?

At the heart of this question is the assignment of injury-producing causes to the product, the user, or the environment, singly or in some combination. Equally important is the identification of factors which are not causative, but preventive.

"At the heart of this question is the assignment of injury-producing causes to the product, the user, or the environment . . ."

This subject was the target of a recent nationwide survey carried out by Market Facts, Inc., sponsored by 18 private and government organizations, including the National Safety Council, Underwriters' Laboratories, the National Bureau of Standards, the Food and Drug Administration, and several trade associations. The study was designed to provide basic data on the incidence and nature of injuries and property damage around the home. The profile of each injury identified includes information about the severity of the injury, its perceived cause, and the product, substance, or environmental condition associated with the accident. The study also sought the respondent's opinion on the preventability of the incident.

The survey was carried out in two phases. In the first, questionnaires were mailed to 35,000 member households. Each respondent was asked to recall personal injuries suffered by any member of the household, and damage to household property, during the period November 15, 1970 to February 15, 1971. In the second phase, the responding households were asked to maintain a diary on similar incidents for the period February 15 to May 15, 1971.

For the purpose of the study, an "injury" was defined as one which restricted usual activities for one day or more, or required skilled medical attention, or both.

In the first phase, answers were received from 26,915 households, representing 92,588 individuals. The second phase responses covered 21,812 households and 72,722 individuals. For both phases of the study, 6,118 injuries, including 9 fatalities, were reported.

The injury rate was highest among persons under 20 years of age, slightly above the survey's average among persons 75 years of age or older, and lowest among those in the 35-44 age group. There was no difference in the injury rate by sex.

Based upon respondents' narrative descriptions of the circumstances surrounding personal injuries, 52% of all injuries reported in this study involved the injured person in one or more of the types of actions described below:

1. Tripping over
2. Falling off or out of
3. Striking with arms or legs
4. Bumping into
5. Slipping on
6. Reaching for
7. Trying to pick up or move
8. Dropping or toppling the object down upon one's self.

Environmental conditions were cited in 31% of the incidents, the factor most frequently associated with the personal injuries reported. The next most frequently mentioned category was participation in active sports (24% of the cases).

A general summary of the factors associated with the reported injuries is given in Table 1.

The most prevalent types of reported injuries were sprains or strains (30%); cuts, punctures, or lacerations (33%); bruises, scrapes, or contusions (20%); and fractures or dislocations (17%). Treatment at a hospital or doctor's office was reported about equally; only 5% of the injuries received no medical treatment.

With respect to the respondents' views on causes of injuries, the injured person was reported primarily responsible in 43% of the cases. Other primary causes were environmental conditions (22%), and a product or substance (18%). In addition to primary causes, contributing causes were involved in 69% of the injuries, and these were named as environmental conditions (20%), and the injured person (15%). The respondents thought that 76% of the reported injuries were preventable.

The results of the Market Facts study indicate the complexity of product safety issues. Many interrelated factors are involved, some human, some environmental, and some product-related. In the consumer's viewpoint, as represented by the Market Facts survey, these factors frequently combine to emphasize the contribution of the injured person to the accident.

"The results of the Market Facts study indicate the complexity of product safety issues."

The trained safety analyst, however, might view the same incidents from a *preventive* viewpoint, and for that purpose come to different conclusions. Thus, for example, in an accident where a child is scalded upon overturning a hot-water vaporizer, he and his parents might see himself, another child, an unexpected indoor environmental condition, or some combination of these, as the cause of the accident. However, none of these factors points directly to one effective preventive technique, i.e., the use of a cold-water vaporizer, rather than its higher temperature counterpart. From this point of view, the cause of the specific incident is not nearly as instructive as a more broadly based preventive analysis. Product safety evaluation, therefore, should include both causative and preventive analyses, and careful weighing of the advantages and disadvantages of the alternatives which are identified. This is the appropriate perspective from which to view product safety problems.

As the National Commission on Product Safety stated in its report, "The prospects for measurable reform of human behavior are distant," so some of the focus in the search for ways to improve product safety should turn to factors which might offset the likelihood of human error, or minimize its

TABLE 1

MARKET FACTS SURVEY—SUMMARY OF RESULTS ENVIRONMENTAL CONDITION, SUBSTANCE OR PRODUCT CLASS ASSOCIATED WITH REPORTED INJURIES

Environmental Condition, Substances or Product Class Associated with Injury as Reported by Respondent	Reported Injuries		
	Number of Injuries	% of Total	Rate Per 10,000 Persons Per Quarter
Environmental Conditions:	**1,848**	**31%**	**112**
Outdoor	1,283		
Indoor	565		
Sports-Recreation:	**1,437**	**24%**	**87**
Active Participation	644		
Rec. Equip., Non-Self Prop.	481		
Wheel Goods	150		
Rec. Equip., Self-Propelled	87		
Toys/Games/Hobbies	59		
Weapons/Explosives	16		
Furniture-Furnishings:	**604**	**10%**	**37**
Furn./Furnishings Except Infant or Toddler Furn.	423		
Furn. & Accessories, Outdoor	68		
Fabric, Except Clothing	66		
Furn., Infant & Toddler	47		
Animate Objects:	**566**	**9%**	**34**
Food & Food Preparation Products Unpowered:	**371**	**6%**	**22**
Containers (Glass, Plastic, Metal)	171		
Cutlery, Utensils	119		
Foods, Beverages, Cooking Products	81		
Home Maintenance Products & Equip.:	**238**	**4%**	**14**
Tools, Hand	88		
Ladders	42		
Tools, Power	40		
Home Maint. Products	36		
Outdoor Equip., Powered	32		

TABLE 1, Continued

MARKET FACTS SURVEY—SUMMARY OF RESULTS ENVIRONMENTAL CONDITION, SUBSTANCE OR PRODUCT CLASS ASSOCIATED WITH REPORTED INJURIES

Environmental Condition, Substances or Product Class Associated with Injury as Reported by Respondent	Reported Injuries		
	Number of Injuries	% of Total	Rate Per 10,000 Persons Per Quarter
Applicance & Electronic Products & Equip.:	162	3%	10
Home Appliances, Small	63		
Home Appliances, Major	39		
Open-Flame Devices	29		
Electronic Equip.	18		
Heating/Air Cond., Portable	13		
Housing Equipment & Systems, Permanently Installed:	137	2%	8
Plumbing Fixtures/Systems	49		
Architectural/Structural Glass	42		
Heating/Air Conditioning, Non-Port.	31		
Electrical Fixtures/Systems	15		
Vehicles, Non-Moving:	114	2%	7
Health & Personal Care Products:	114	2%	7
Medicines, Ointments, Remedies	50		
Personal Care Products	40		
Aids for Injured, Handicapped or Aged	24		
Wearing Apparel:	57	1%	3
Clothing, Footwear & Acessories			
Others:	370	6%	22
All Others (Not Elsewhere Classified)			
Condition, Substance or Product Not Reported:	100		7
(Total)	**(6,118)**	**(100%)**	**(370)**

Based upon respondents' verbatim descriptions of the injured person's activities at the time the injury occurred, about three of every ten injuries were inflicted by or closely associated with some type of "Environmental Condition". Involvement in "Sports-Recreation" was associated with 24 percent of the reported injuries. Therefore, the top two categories accounted for more than half of the personal injuries reported.

harmful effects. In this process, however, the consumer's role in his own safety should not be ignored. Programs addressing this topic can bring improvement which is important, because people can and do learn to adapt in coping with their environment.

A broader question exists which affects every issue raised in this report: how much safety is reasonable, or required, in any given case? The National Commission on Product Safety considered this problem and after two years of study concluded that "no completely satisfactory definition is possible" for unreasonable hazards. The Commission's discussion of the point includes the following statement by Professor Corwin D. Edwards:

> "Risks of bodily harm to users are not unreasonable when consumers understand that risks exist, can appraise their probability and severity, know how to cope with them, and voluntarily accept them to get benefits that could not be obtained in less risky ways. When there is a risk of this character, consumers have reasonable opportunity to protect themselves; and public authorities should hesitate to substitute their value judgments about the desirability of the risk for those of the consumers who choose to incur it.
>
> But preventable risk is not reasonable (a) when consumers do not know that it exists; or (b) when, though aware of it, consumers are unable to estimate its frequency and severity; or (c) when consumers do not know how to cope with it, and hence are likely to incur harm unnecessarily; or (d) when risk is unnecessary in . . . that it could be reduced or eliminated at a cost in money or in the performance of the product that consumers would willingly incur if they knew the facts and were given the choice."

Application of this definition also requires an understanding that some consumers have limited capability or limited experience for judging these risks. Therefore, manufacturers' decisions in this area require extensive experience, information, and evaluation to make the appropriate choices on behalf of the consumer.

These are some of the complexities involved in the development of public and private policy on product safety. They point to the fact that there is no simple answer to safety problems, and that a comprehensive systems methodology is required to review and integrate the intricate considerations which arise.

As a result of its analysis of these problems, the Commission concluded that "the greatest promise for reducing risks resides in energizing the manufacturer's ingenuity." The Sub-Council agrees with this emphasis, but not to the exclusion of the roles of a number of companion institutions in a position to contribute—retailers, distributors, trade associations, testing laboratories, standards-writing organizations, public education systems, insurance companies, the National Safety Council, government injury data gathering agencies, and others. The chapters which follow more specifically discuss the opportunities which lie in these areas, as well as those within the manufacturer's purview.

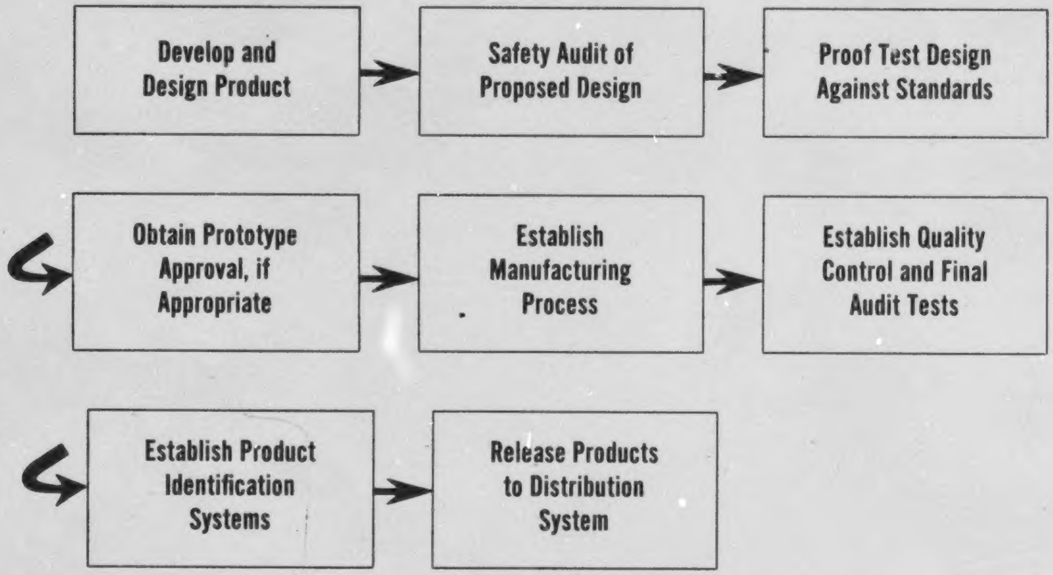
All of these opportunities need to be examined thoroughly, but this search for progress should be pursued with a sense of realism. Sharp reductions in national injury rates simply will not occur in the near future. By the very nature of the problem, changes will have to be incremental, but even a 1% reduction in injuries would amount to 200,000 or more, and that is substantial by any measure of the public good.

"... even a 1% reduction in injuries would amount to 200,000 or more, and that is substantial by any measure of the public good."

As mentioned earlier, a Federal agency with broad powers to regulate the safety of consumer products was established in 1972. The Congressional deliberation preceding the enactment of the legislation produced volumes, and the Sub-Council has no new information that would differ from the evidence stated and re-stated many times on each side of the issues involved. However, some opportunities for progress have been neglected because of this legislative focus, and the report which follows attempts to identify in a comprehensive context the many additional ways in which the private sector can contribute to improved product safety.

Chapter I. Manufacturing Activities and Product Safety

A. Product Design and Manufacturing


Develop and Design Product
Safety Audit of Proposed Design
Proof Test Design Against Standards
Obtain Prototype Approval, if Appropriate
Establish Manufacturing Process
Establish Quality Control and Final Audit Tests
Establish Product Identification Systems
Release Products to Distribution System

Develop and Design Product

The most important factor in the development and design of a safe product is complete and coordinated commitment to the task by all levels of management. This is basic to a systems approach to product safety, which is the only reliable way to assure that the resulting product will meet society's standards in this area.

For any product, the development and design activities comprise the most fluid stage in its preparation for the marketplace. It is also one of the most important, for once performance specifications have been selected and the design has been committed, it will dictate in large measure what processes, materials, and quality control procedures will be required. While it is true that modifications for cause are always possible during later stages, the initial design will remain as the dominant factor in these decisions.

From a safety point of view, each product is unique. Within a company, however, there is usually a significant body of experience which can be used as a beginning guide for a rigorous review of safety related factors. A typical system for this identification of product hazards and their evaluation is shown in Exhibit 3.* It involves the identification of hazard sources and their possible interaction with users and the environment. This analysis produces an assessment of the frequency and severity of possible injuries, and can identify alternative component or end product designs which might have a different estimate of risk of injury. In this process the whole range of human behavior has to be examined to be sure that intended uses and reasonable misuses are considered. Once again, checklists, such as those shown in Exhibits 4 and 5, are available to guide the evaluation. The alternatives conceived must be carefully evaluated by weighing the additional costs incurred, not only in price but in reduced performance features or convenience. If any of these product characteristics are unacceptable to consumers, they may turn to solutions involving inherently greater hazards.

"From a safety point of view, each product is unique."

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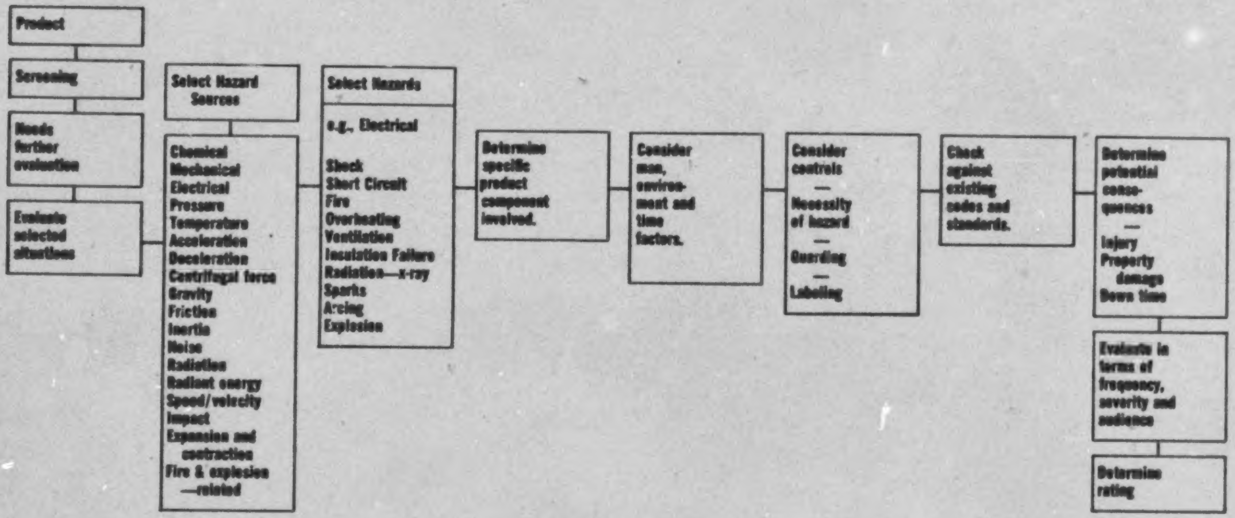
* The materials contained in Exhibits 3, 4, and 5 have been prepared by M. F. Biancardi, Assistant Vice President, Employers Insurance of Wausau.

Exhibit 3

SYSTEM FOR IDENTIFYING AND EVALUATING PRODUCT HAZARDS


Product
Screening
Needs further evaluation
Evaluate selected situations
Select Hazard Sources
Chemical
Mechanical
Electrical
Pressure
Temperature
Acceleration
Deceleration
Centrifugal force
Gravity
Friction
Inertia
Noise
Radiation
Radiant energy
Speed/velocity
Impact
Expansion and contraction
Fire & explosion —related
Select Hazards
e.g., Electrical
Shock
Short Circuit
Fire
Overheating
Ventilation
Insulation Failure
Radiation—x-ray
Sparks
Arcing
Explosion
Determine specific product component involved.
Consider man, environment and time factors.
Consider controls
—
Necessity of hazard
—
Guarding
—
Labeling
Check against existing codes and standards.
Determine potential consequences
—
Injury
Property damage
Down time
Evaluate in terms of frequency, severity and audience
Determine rating

Source: Reprinted from ASM Report System paper C70-29.3, originally presented at the 1970 ASM Materials Engineering Congress.

Exhibit 4

Checklist of some "Hazard Sources"

Chemical
Mechanical
Electrical
Pressure
Temperature
Acceleration
Deceleration
Centrifugal force
Gravity

Friction
Inertia
Noise
Radiation
Radiant energy
Speed/velocity
Impact
Expansion and contraction
Fire and explosion—related

Checklist of Some Hazards Associated with "Hazard Sources"

Chemical

1. Corrosive
   To animals
   To plants
   To materials
2. Toxicity
   By inhalation
   By skin absorption
   By ingestion
3. Flammable
4. Pyrophoric
5. Explosive
6. Shock sensitive
7. Oxidizing
8. Photoreactive
9. Water reactive
10. Peroxide former
11. Carcinogenic
12. Decomposes

Noise (Pressure)

1. High intensity
2. High frequency
3. Impulsive
4. Vibration

Radiation

1. Alpha emitter
2. Beta emitter
3. X-ray emitter
4. Gamma emitter
5. Neutron emitter

Radiant Energy (Electromagnetic or Non-ionizing)

1. Ultra Violet emission
2. Visible Light emission
3. Infrared emission
4. Microwave emission
5. Radio Wave emission

Electrical
Shock
Short Circuit
Fire
Overheating
Ventilation
Insulation Failure
Radiation—X-ray
Sparks
Arcing
Explosion
Fire and explosion—related
Fuel source
Rate of flammability
Ignition Source
  heat (chemical)
  heat (spontaneous)
  heat (mechanical)
  spark (mechanical)
  spark (electrical-static)
  open flame
Mechanical
Rotating, reciprocating and transverse motion
Cam action
In-running nip points
Cutting actions—motion
Cutting exposure—sharpness
Punching, shearing and bending actions
Rate of speed
Unstable
Entrapment
Lack of clearance
Misleading appearance of quality
Stored energy
Improper rigidity
Impact

Source: Same as Exhibit 3.

Exhibit 5

Checklist of Some Man, Environment and Time Factors

1. **Man.**

   a. The primary variable to be considered includes applicable aspects of man's culture, history, politics, customs, in fact, the whole psychology. Include the consumer, the dealer, the retailer, the operators and maintenance men.

   b. General characteristics.
      (1) Physical dimensions.
      (2) Capable of data sensing.
      (3) Capable of data processing.
      (4) Capability for motor activity.
      (5) Capability for learning.
      (6) Physical and psychological needs.
      (7) Sensitivities to physical environment.
      (8) Sensitivities to psycho-social environment.
      (9) Capability for coordinated action.
      (10) Variability within and between individuals with respect to all these characteristics.
      (11) Stress leading to human error. Such can occur when men's physical, physiological, psychological or biochemical limitations are exceeded.

   c. Human errors (which can degrade system reliability) include:
      (1) Failure to perform all or part of a task.
      (2) Performance of a task or step incorrectly.
      (3) Introduction of some task step which should not be performed.
      (4) Performance of some task step out of sequence.
      (5) Failure to perform the task step within the allotted time period.

2. Environment. Consider how it may change, how it may contribute to an accident. Part of the definition for environment from Webster:
   "Something that environs: SURROUNDINGS."
   "Surroundings" may include consideration of physical surroundings; climate (tropical, arid, etc.), area, weather (rain, cloudy, snow, etc.), rural, urban, forest, highway, street, gravel road, construction site (buildings, roads and streets, bridges, etc.); marine, military, laboratory, industrial plant (type); state, region, terrain (mountainous, valleys, plain); home, office, store, machine shop, refinery, etc.

3. Time. "Time" is a variable associated with "*change*" which may occur within any product. Consider a continuum from point of departure from factory; to intermediate storage and distribution, to retail storage, distribution and preparation; delivery to user; operation, storage, servicing and disposal.

Source: Same as Exhibits 3 and 4.

Exhibit 5 (Continued) **Checklist of Some Factors**
Potential Failure of Malfunction Loss Exposures

"Failure of malfunction loss exposures" are situations where breakdown of a product or component occurs, or a product operates in a non-standard or unintended manner, and injury or loss may result.
A checklist of some factors that may be associated with these "failure or malfunction" conditions follows:

Physical stress
Wear
Overload
Temperature—variation—extremes
Pressure—variations—extremes
Aging
Moisture
Inadequate or improper maintenance
Improper material
Parts substitution
Improper use
Work defects
Design defects
Stored energy
Electrical leakage or short
Airpockets in a closed system
Maladjustment
Unrealistic service requirements
Loss of power

Safety Audit of Proposed Design

When the design has been completed and initially checked for compliance with safety criteria, it needs to be audited against corporate safety policies, and all other safety requirements. Over time, and over a range of products in a given company, an effective way to identify and apply the knowledge and experience needed to carry out this audit is through the use of a broadly-based review council, chosen from within the company. The council should contain representatives from at least the following functions:

1. Marketing
2. Engineering
3. Manufacturing
4. Quality Control
5. Legal
6. Servicing
7. Customer Relations

These should include a mixture of higher level management, operating personnel, and technical staff. A special effort should be made to include in the safety review council, managers who understand the consumer's needs and viewpoints on similar products as expressed in correspondence, complaints, surveys, and other direct sources of consumer information. In addition, technically qualified consultants might be retained to assist in this process.

"A special effort should be made to include in the safety review council, managers who understand the consumer's needs and viewpoints . . ."

This review team should use a well defined internal policy on safety, containing clearly drawn lines of responsibility and authority. Applicable corporate, industry, government, or other safety-related standards, both voluntary and mandatory, should be identified and applied to the product. The same checklist against which the design was conceived should again be considered to determine the degree of compliance actually achieved, particularly with respect to anticipated customer use and misuse.

Proof Test Design Against Standards

After a product has successfully passed the development and design stage it is usually given substance by the construction of a prototype. This is necessary to determine the manufacturability of the design and the requirements for materials, manufacturing processes, and quality control procedures.

Once the ability to manufacture economically is proven, the product must then be tested in all its intended modes of operation for compliance with applicable safety standards, in addition to other product quality standards enforced by the manufacturer. Any unique quality control procedures are also determined at this time.

Because the prototype is generally hand-crafted on nonproduction machinery by skilled technicians it is not possible at this stage to completely determine the final safety characteristics of production units. This can be estimated and evaluated at this point by knowledgeable technicians, but the evaluation should be verified by a subsequent check of the manufactured items.

Obtain Prototype Approval, If Appropriate

In some cases, product prototypes are tested by laboratories which certify compliance with applicable standards and authorize the use of a seal. In addition to providing an objective review of the product's safety characteristics as required by the certification programs, these laboratories can be a helpful check on the thoroughness and effectiveness of internal corporate safety procedures.

Establish Manufacturing Process

At this point, final determinations must be made of the actual manufacturing processes to be used to produce the product. Economic considerations are significant here and managers have to be concerned about the inherent danger of compromising safety in

"... managers have to be concerned about the inherent danger of compromising safety in efficiently designing the production system."

efficiently designing the production system. The safety review council described above can be helpful in reviewing decisions on the materials to be used and their fabrication requirements. Defective material, improper tooling, or inadequate processes, if used in the manufacture of an otherwise safe product, can create hazards which are often extremely difficult to detect.

Changes in the initially approved design may be required as the manufacturing requirements unfold. Each revision calls for a careful consideration of its effect on product safety.

Establish Quality Control and Final Audit Tests

Written instructions for the production of the product are essential to this step. Manufacturing process instructions, quality control inspection and in-process instructions, quality assurance test methods, quality audit test instructions, and any other applicable procedures need to be documented. The diligence with which these documents are written, maintained, and followed determines their effectiveness in assuring the continuing integrity of the products produced.

For example, engineering changes in the product should be promptly reflected in these instructions. Once outdated, these procedures can result in a false sense of security and perpetuate practices which are no longer adequate to identify and correct safety problems. It is also important to note that in a carefully designed product safety system, each inspection along the line of production is an essential element of the overall reliability of the system. As other conditions change, these factors must be re-examined to assure continued quality of production.

In addition to its ability to detect problems, the quality control function needs sufficient independence and authority to halt the manufacturing process either on its own authority or by quick access to higher management for review and decision if the intended product quality is not being realized. A follow-up system is also needed so that deficiencies can be quickly assessed and followed by corrective measures to prevent recurrences. In addition, procedures may be required to correct defective products which may have been produced before the problem was discovered.

Thus, the final audit of the product as it comes from the production line is of paramount importance since this is the last opportunity within the factory to detect problems. *The next quality check will be conducted by the consumer.* In this sense, those conducting the final audit are "consumer advocates". They act for the ultimate consumer.

"... those conducting the final audit are 'consumer advocates'. They act for the ultimate consumer."

In addition to assuring the quality of the output, the information feedback from the final audit can be helpful in identifying changes in the manufacturing procedures which result in a safer or more economical production process.

Establish Product Identification Systems

Although a disciplined system of design, production and quality control provides high assurance that manufactured products conform to all safety requirements, there is always a possibility, however small, that through some unforeseen combination of circumstances, a batch of products may be produced and subsequently be found to have a safety defect. The problem of locating and correcting such defects will range from straightforward to complex, depending on the extent to which the defective batch has penetrated the distribution system. Products which are still in the factory warehouse are easily located and corrected. With progressing levels of complexity they may be located in regional warehouses, distributors' warehouses, and retailers' shelves. Varying forms of product identification and locating systems are presently being employed. Detailed systems are being used which include individual serial numbers on the product with supporting customer purchase records permitting tracing the product to the ultimate customer, as in the case of automobiles. Many products, however, are difficult to identify on an individual product basis. Often, these products are identified by a lot number. In such cases the individual product is not identified, and at that step in the distribution system in which it is separated from the the lot, it loses its identity.

Usually product defects serious enough to warrant field rework are discovered shortly after they are produced and the deficient products are still predominantly in the distribution system. If a defect is not discovered until after sale to the ultimate customer, the manufacturer has only three ways to deal with a defect of such gravity as to require rework or recall of products in consumers' possession: (1) if owners' names and locations are known by the manufacturer, he can contact them directly; (2) if their names and locations are known by distributors or dealers, he can request the cooperation of these parties in contacting owners or providing him with the information to do so himself; (3) if he has no way of assuring direct contact with virtually all owners, he can attempt to contact them through public news media. The manufacturer should evaluate the various methods of dealing with a defect requiring rework or recall and adopt that system which is most appropriate for its own products.

The Consumer Product Safety Act establishes criteria and procedures for the notification of the Consumer Product Safety Commission by manufacturers and distributors when they obtain information regarding a product defect as defined in the new Act*

Release Products to Distribution System

The proper handling, storage, and transportation of a finished product is a science of its own. Critical evaluation of the rigors of distribution on the safety and integrity of the product is necessary, to assure that the product still meets its safety criteria when it reaches the consumer.

The design of a container in which to store and ship a finished product, to protect it from damage which could impair its safety and quality, can be as complicated as it is important. Materials which adversely affect the product under distribution conditions have to be avoided, as do materials which might themselves be a safety hazard after the product is unpacked.

Deterioration of materials in the product or its package from exposure to extremes of temperature, humidity, shock, and vibration is a constant threat. A product designed to operate safely and efficiently at room temperature must still be able to withstand expected extremes of temperature encountered during shipping and distribution. In transporting a product from the manufacturing plant to its distribution centers, it may experience temperatures which range from well below 0° F to 150° F, or higher, as well as wide variations in atmospheric pressure and humidity. These factors need to be considered from the earliest point in the design of a product, and throughout its production cycle.

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* Section 15, P.L. 92–573 (See Appendix).

This brief review of the highlights of safety related activities within the manufacturer's purview stresses the need for the carefully organized systems approach mentioned at the outset, to assure the highest reasonable degree of safety for manufactured products. Considering the scope and variety of national manufacturing activities, any attempt to design even a general approach applicable to all manufacturers, large and small, would be meaningless. However, one principle does emerge which should be taken as corporate policy by *all* manufacturers of consumer products. It is stated in the following recommendation:

". . . one principle does emerge which should be taken as corporate policy by all manufacturers of consumer products."

RECOMMENDATION 1

CORPORATIONS WHICH MANUFACTURE CONSUMER PRODUCTS SHOULD MAINTAIN AND ENFORCE WRITTEN SAFETY POLICIES, STANDARDS AND PROCEDURES ON ALL PERTINENT CORPORATE ACTIVITIES. THESE DOCUMENTS SHOULD BE REGULARLY REVIEWED AND UPDATED.

Manufacturers engaged in the production of inherently dangerous products know this by necessity as a way of life. All product manufacturers need such a policy as part of their basic method of operation.

To be useful in guiding employee practices, the written procedures should be specific about those operations related to the safety of the corporation's products. At a minimum, they should include:

●1. Statement of corporate philosophy and policy on the safety of its products.
●2. Establishment of an internal, broadly based, safety review council, including managers who are closest to consumer experiences with the products involved.
●3. Guidelines for safe product design.
●4. Product safety test procedures.
●5. Quality control procedures.
●6. Final audit procedures.
●7. Product identification systems.
●8. Consumer complaint handling procedures, when safety is involved.

These procedures should be examined and revised on a regular basis. The role of top management is central to the effectiveness of this set of practices, to see to it that these operating instructions are taken seriously throughout the corporation.

A Role for Insurance Companies

Insurance companies which offer product liability coverage can contribute to the quality and effectiveness of many of the techniques described above. With sharply rising rates of liability claims and plaintiff recoveries, decisions on insurability and rates will increasingly be based on the adequacy of manufacturers' internal procedures to reduce product liability. Since the financial risk which attends ineffective product safety procedures can move from the manufacturer to the insurance company, there is strong incentive for insurers to act on this front. The development of methods to improve these practices is an appropriate competitive objective for the nation's insurance companies.

In this regard, insurance companies can act as objective partners to product manufacturers in developing the internal systems needed to reduce product safety problems. This can be particularly useful to the manufacturer without the technical staff needed to create these systems.

In view of the opportunities which exist in this area, the Sub-Council recommends:

RECOMMENDATION 2

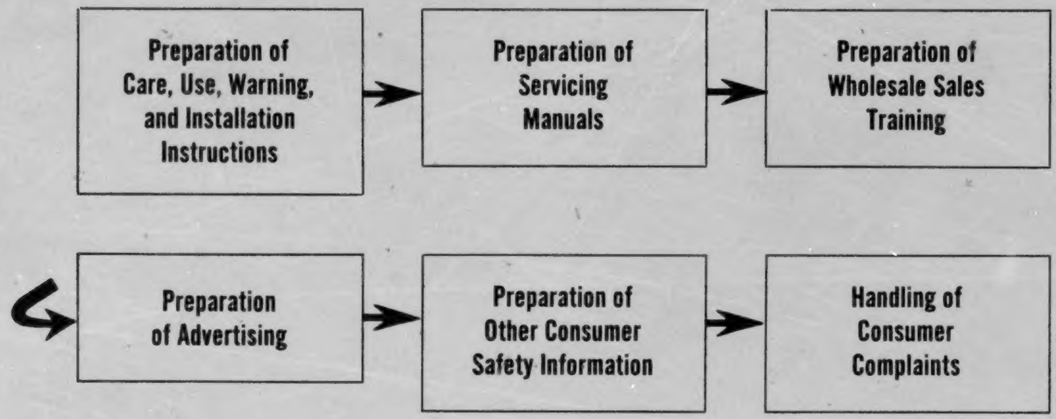
INSURANCE COMPANIES OFFERING PRODUCT LIABILITY COVERAGE SHOULD DEVELOP TECHNIQUES TO ASSIST THEIR CORPORATE CLIENTS IN ESTABLISHING EFFECTIVE PRODUCT SAFETY PRACTICES.

For most of the insurance industry, this will require new practices and new skills. Engineers and other technically trained staff, not normally employed within the industry, will be needed to carry out these programs with manufacturers seeking insurance. It should be noted, however, that no new institutions, and no new government roles, are required.

The independent review and monitoring involved in insurance negotiation on this basis can bring top level visibility and attention to product safety procedures within the corporation without violating the confidence of matters appropriately held confidential. In this sense, the insurance company is an ideal partner to corporate management to help assure that products are produced in accordance with sound safety criteria.

These activities by insurance companies can complement the many other sources of advice on product safety practices available from independent laboratories, safety consultants, universities, and government agencies.

B. Consumer Safety Information Prepared by the Manufacturer


Preparation of Care, Use, Warning, and Installation Instructions
Preparation of Servicing Manuals
Preparation of Wholesale Sales Training
Preparation of Advertising
Preparation of Other Consumer Safety Information
Handling of Consumer Complaints

Preparation of Care, Use, Warning, and Installation Instructions

Manufacturers have the responsibility to inform consumers on the safe use and care of their products. This information is presented in a wide variety of forms, but typically it is offered in the following four ways:

●1. Use and Care Manuals

Many consumer products are shipped from the manufacturer with information addressed to the consumer on proper care and use. Usually, more expensive products have elaborate instructions which reflect their complexity and the benefits to be gained from proper care.

There is a natural tendency to stress the benefits and pleasures of ownership in these care and use manuals, and to downplay the dangers. Clear, concise, and prominent cautions on the dangers of misuse should be included in all of these publications.

●2. **Installation Instructions**

If it is intended that consumers do their own installation, the instructions should be prepared in language typical consumers can understand. If it is not intended that they do their own work they should be warned of the consequences of improper installation.

●3. **Permanently Affixed Information**

If certain procedures or precautions are essential to safe use, permanently attached warnings or instructions should be considered.

●4. **Hang Tags and Point of Sale Displays**

These materials usually describe product characteristics in a selling mode designed to attract the consumer's attention on a few key points. While this is not normally an appropriate vehicle for presenting safety precautions, there might be an opportunity to highlight some safety characteristics of the product. More importantly, the information which is presented should not mislead the consumer on the safe use of the product.

Preparation of Servicing Manuals

The manufacturer also has the responsibility for preparing manuals and providing training to those who will service his product after sale. It is obvious that a repair man, disassembling, correcting, and reassembling parts of the product, can have a profound influence on the safe performance of the product after service. Moreover, this activity is not monitored by quality control systems similar to those found in manufacturing plants. These problems also exist at the time of installation when local codes, installation instructions, and common sense are the major guides to safe installation.

These situations confuse the issue of responsibility in the event of a consumer injury or property damage. Regardless, the more germane issue is the need for extra effort and continued diligence aimed at assuring a safe repair. For instance, there are likely to be some simple post-service safety checks which can be described in service manuals and taught to servicemen. For example, for appliances there are routine electrical checks, such as looking at the power cord, which can be carried out on any service call which will detect some unsafe conditions, whether or not they are related to the problem identified by the consumer. In addition, since service personnel usually converse with the householder it is possible to transmit safety tips at this time.

The major point here is that service manuals, service training, and the performance of repair services are important links in the total safety system, and deserve special attention because of their unique character.

Do it yourself repairs are a special problem. Instructions on those repairs which are deemed safely accomplishable by normal consumers should be clearly described. Conversely an equally clear statement should be made that qualified servicers should be called upon to perform all other repairs.

Preparation of Wholesale Sales Training

The manufacturer's salesmen who call on and sell to wholesalers who are the first step in the distribution system have an opportunity to promote safety understanding among their customers. Wholesale sales training material should be written so as to encourage such general understanding.

Preparation of Advertising

Most large manufacturers prepare national level advertising and most of the copy for local advertising of their products. With the need for extra emphasis on the safe use of products there is an opportunity for some improvement in this area. In the preparation of ad copy or television ads, the message should carefully avoid inferences or statements suggesting that misuse of the product is acceptable. Sometimes an unreasonable misuse episode is portrayed in order to demonstrate that the product satisfactorily survived the misuse. The message of ruggedness is effectively transmitted, but simultaneously the impression can be left that mistreatment will not affect safe performance. The balance to be maintained here is a delicate one and renewed attention to the appropriate message is required.

". . . the message should carefully avoid inferences or statements suggesting that misuse of the product is acceptable."

The Sub-Council therefore recommends:

RECOMMENDATION 3

ALL ADVERTISERS SHOULD REVIEW THE CONTENT OF THEIR MESSAGES FOR SAFETY IMPLICATIONS.

This principle should be incorporated in policies and procedures for the creation, review, and approval of advertising messages, including packaging and display material.

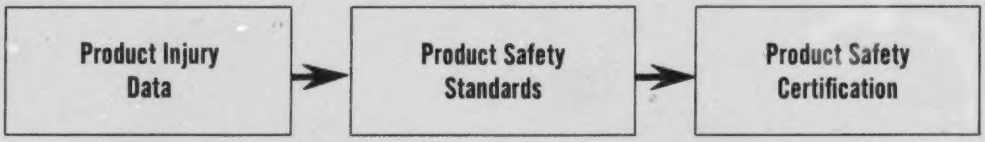
Preparation of Other Consumer Safety Information

In addition to the information channels associated with the advertising and sale of products, there are many other avenues for communication of useful safety information to consumers. One of the most effective channels for this information is the wide variety of "shelter" magazines which are distributed to consumers at all levels. Manufacturers can and do initiate and encourage the inclusion of material in these publications that brings pertinent product safety information to the attention of their readers. Homemaking editors, and others responsible for newspaper copy on topics of interest to consumers are also good channels for this type of constructive advice to the public.

Handling of Consumer Complaints

For some items, the consumer complaint system established by retailers and manufacturers can be a meaningful source of insight into previously unrecognized product shortcomings. It can also provide the opportunity to transmit consumer safety information to customers. Most of these systems concentrate on quick and effective response to the difficulty cited by the consumer. In some cases, however, the consumer may not fully understand the safety implications of the product failure involved, so an opportunity exists within the complaint handling system to insure that he understands these problems. Managers responsible for these systems should monitor them carefully to be certain that proper information is fed back to the customer, and also to insure that product deficiencies revealed by the system are appropriately described to those responsible for the design of the products.

Chapter II. Product Safety Standards



In the U.S., voluntary standards for manufactured products can be traced back as far as Eli Whitney and his unprecedented techniques for producing firearms with interchangeable parts. However, those were proprietary standards covering only a limited aspect of design and production. It took many decades to carry standards beyond this narrow application in individual firms.

A notable milestone during this period was the Federal government's first sponsorship of private sector research and development in 1846, in an attempt to establish safe materials and designs for boilers to reduce the number of deaths and injuries from steamboat explosions. This effort eventually led to the establishment of several professional standards organizations, including the American Society for Testing and Materials, which continues today as one of the most widely recognized and productive voluntary standards-writing organizations in the world. Nevertheless, only a tiny fraction of today's public knows of its existence, much less the extent of its contributions to the national well being. The same conclusion applies to the entire system of voluntary standardization in the United States.

The spotlight has fallen intermittently on this process because of its importance to public safety, but never more strikingly than upon the occasion in the early 1900's when a 30 hour fire devastated Baltimore's business district. The fire departments of nine neighboring cities looked on helplessly because their hoses could not be coupled to each other, nor to the Baltimore hydrants. A subsequent U.S. Commerce Department investigation found over 600 varieties of fire hose couplings across the nation. A single voluntary "national standard" was selected within the following year.

"*However, consumers have not often understood, nor contributed directly to, the establishment of these standards.*"

In the past 50 years, standards have developed rapidly for a variety of purposes such as common definitions, interchangeability, reproducibility of results, simplification by standardization, safety, and many others. However, consumers have not often understood, nor contributed directly to, the establishment of these standards.

Good standards have also been basic to the operation of the nation's economy. This fact became a prominent national issue in the 1920's as the country sustained strong industrial growth. The potential chaos from the lack of standards to guide burgeoning output led many industrial and governmental leaders to move to prevent growing duplication, waste, and inefficiency.

Prior to his appointment as Secretary of Commerce, Herbert Hoover headed an engineering society which surveyed the situation and concluded that 25% of the economy's production costs could be eliminated by standardization. The response to Hoover's "crusade for standards" was dramatic. The national system for voluntary standards grew sharply and it now totals over 400 standards-writing organizations. Today, the nation would be faced with technological chaos without the standards created by these institutions.

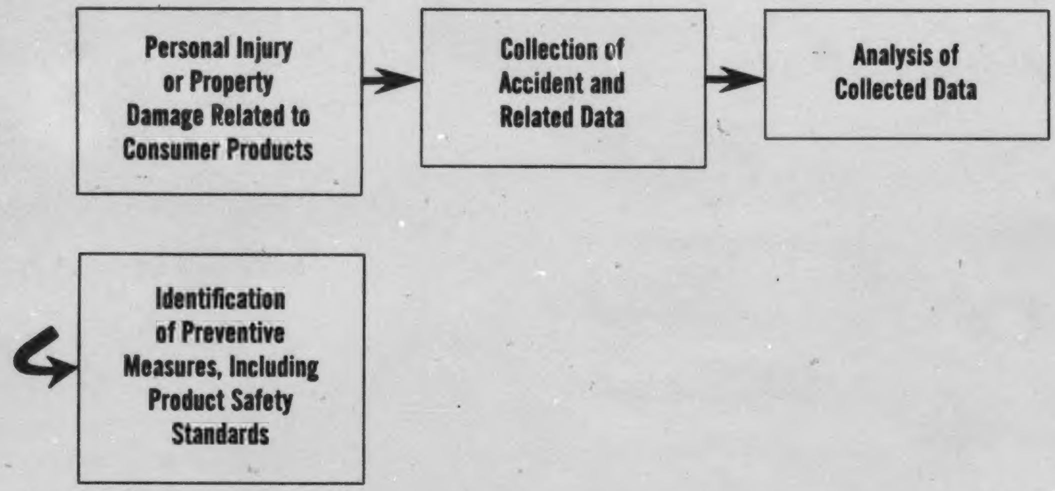
The voluntary standards system also contributes in countless ways to public safety—for example, with the National Electrical Code, and the thousands of other voluntary standards which have been codified by communities across the country.

"*... most of the technical expertise necessary to the development of effective standards resides in the private sector.*"

A fact often overlooked is that previously created voluntary standards form the basis for most mandatory standards promulgated by governments at all levels. This follows from the fact that most of the technical expertise necessary to the development of effective standards resides in the private sector.

Although not precisely measurable, the success of this system in terms of productivity and economic efficiency has been significant, and the search for improved operations through better standards has become ingrained and commonplace in the American industrial system. For this reason, the voluntary standards system is an appropriate area for consideration in our attempt to find ways to improve product safety.

A. Product Injury Data


Personal Injury or Property Damage Related to Consumer Products
Collection of Accident and Related Data
Analysis of Collected Data
Identification of Preventive Measures, Including Product Safety Standards

Personal Injury or Property Damage Related to Consumer Products

Most information relevant to the design of new or improved products comes from the experience, lore, experiments, marketing information, and other sources contained within the producing corporation. With respect to safety, data on accidents associated with the product design comes to the manufacturer's attention primarily in the form of customer complaints, legal actions, and product service information. Most consumers do not register complaints on injuries associated with products unless they believe the product is deficient. Only rarely are manufacturers able to collect reliable data in the form needed to guide selection of priorities and evaluation of hazards because this incidence of injury or property damage is usually too low to have high statistical reliability.

The importance of this information to guide both corporate and regulatory decisions cannot be overstated. The need for a reliable data base on mishaps involving products is one subject which carries a virtual unanimity of opinion among those concerned with the safety of consumer goods, particularly those private and public officials concerned with the identification of effective preventive measures. To be use-

"The importance of this information to guide both corporate and regulatory decisions cannot be overstated."

ful, a data-gathering system for product-related accidents requires several specific characteristics.*

- **1. The Nature of the Information**

  Data on product-related injuries should include demographic characteristics, such as age, sex, geographic location, and economic status. The system should also identify accident frequencies and severity of injuries. The role of the product involved should be described with enough clarity to aid in the identification of preventive measures. The accident circumstances should be covered, including the action of the person involved before and during the accident.

  Data should also include the total time the product is in use to measure the degree of exposure. This exposure information helps prevent erroneous conclusions based on simple accident totals.

- **2. The Sample**

  The data source should provide statistically significant figures within a reasonable time. The sample should be representative of the "total universe" of accidents involving a particular type of product.

- **3. Quality of Information**

  The data should be obtained in a manner which allows determination of its accuracy. Experimental design factors should be taken into account, including methods used to gather the data, recording of the information, time of collection of data, factors affecting recall, and psychological attitudes.

  It should also be possible to use statistical techniques to allow comparison and combination with other studies, particularly for determining the effects of preventive measures.

The data-gathering system should also meet the following criteria:

(a) The cost per question should be reasonable compared to other possible sources;

(b) The time required to get useful information must not be excessive since the information gathered could be invalid if changes in population or behavior occurred; and

(c) It should be relatively easy to repeat the data-gathering operation in order to verify reliability and measure the effects of the countermeasures.

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* Based on work by J. Recht, National Safety Council.

Until very recently, no nationwide data systems which met these criteria were available to guide manufacturers, trade and professional associations, or government in the detailed technical considerations involved in the establishment of improved safety standards for consumer products.

Underlying the difficulty in collection of product injury data is the fact that for any given product, an injury is a relatively rare event. In a population of over 200 million individuals, the annual totals of injuries related to consumer products may seem high, but the samples required to identify and describe the incidents involved are massive and expensive to acquire. Except on a selective, ad hoc basis, surveys of the magnitude required to collect nationwide field data of this type are beyond the capacity of even the largest corporations or trade associations to administer on a continuing basis. For example, the National Health Survey, which interviews approximately 40,000 households per year on sources of injury occuring in the two weeks preceding the interview, would on the average pick up only a few accidental gunshot wounds per year at the rate at which these injuries occur. Because no unified system existed, the National Commission on Product Safety found a paucity of data useful to guide corrective action, and as a result, it recommended development of a strong Federal injury data system to fill this void.

"Underlying the difficulty in collection of product injury data is the fact that for any given product, an injury is a relatively rare event."

This system was started in the Food and Drug Administration's Bureau of Product Safety under a project titled the National Electronic Injury Surveillance System (NEISS). It provides a good basis of experience for the product safety information system required under the new Consumer Product Safety Act.*

In its present form the NEISS system is collecting data on hospital emergency room admissions. A sample of 119 hospitals has been selected which is representative of all hospital emergency rooms in the nation. By contract arrangement with the hospital, a staff member is designated and trained as a coder/transmitter, responsible for input to NEISS. For the NEISS system, injuries are included which restrict usual activity for one day or more, or which require skilled medical care. The system currently excludes automobile and occupational injuries.

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* Section 5, P.L. 92-573 (See Appendix).

The coder/transmitter reviews the emergency room's records each day for those injuries involving consumer products, and transcribes coded equivalents for all relevant data into a specially designed code sheet. The coding includes designation of the category of consumer product and the category of injury. No distinction is made between the primary and remote causes of the injury (i.e., *how* the product was involved) nor between minor and serious injuries except by inference (e.g., whether the patient was admitted to the hospital).

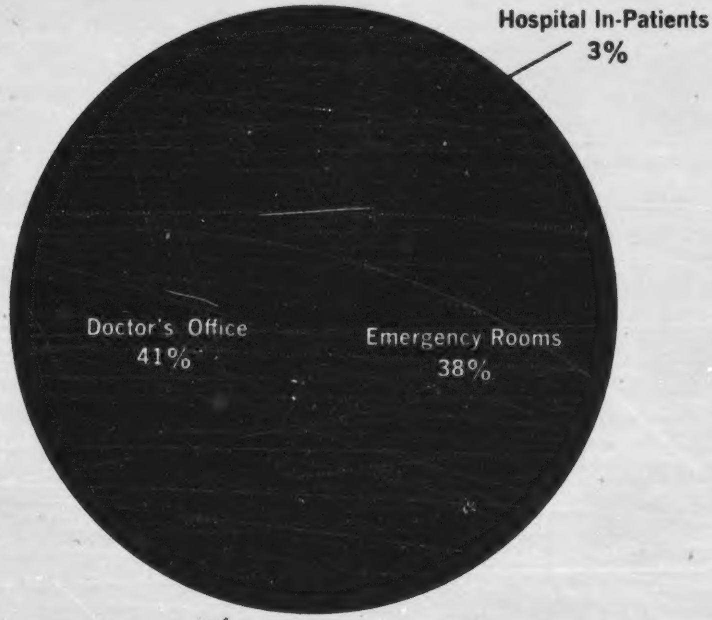
Each day the central computer at FDA in Washington queries the terminals in the hospitals participating in the system, and extracts the day's records. These are compiled, tabulated and analyzed as required by the BPS staff. When in full operation, this portion of the NEISS system is expected to pick up information representing 7,600,000 cases annually.

In addition to the coded data transmitted from emergency rooms, the NEISS data base will include follow-up interviews conducted by FDA field personnel.

Following completion of the hospital emergency room phase, the system will be expanded to include data sources in doctor's offices, community clinics, in-hospital patients, and households. The projected yearly budget for the completed system is $3 to $5 million.

Figure 2

Injury Treatment Distribution



Based on available studies, FDA estimates the nationwide distribution shown in Figure 2 for treatment of accidents.

The NEISS system represents significant progress on the injury data system which the nation has long needed. It should lead to a system which will generate an information base which will help establish priorities and provide a rational basis for effective action on product safety problems. With this in mind, the Sub-Council offers the following conclusions about the structure and operation of this system for consideration by the Federal government:

> *"The NEISS system represents significant progress on the injury data system which the nation has long needed."*

●1. *Complete implementation of the plans for an injury sampling network should be given high priority.* Decisions based on this data can affect the cost of a wide range of consumer products. The required cost-benefit analyses are so extremely complex that highly accurate data is required if further improvements are to be made.

●2. *It is important that the system collect and code all significant data from the outset, since the data can be amplified only by expensive reinterviews by the government.*

●3. *Emphasis should be placed on data which captures the sequence of events leading to an injury.* In this regard, operation and use of the system, including the in-depth follow-up interviews, should continually feed back improvements to the overall system to increase the quality and depth of its data.

●4. *The collected data should reveal the manner in which products are involved in an injury.* For preventive measures, emphasis on describing the precise nature of the injury is much less important than this product-related diagnostic data.

●5. Especially during early development of the system, *emphasis should be placed on obtaining an adequate number of in-depth interviews* to aid in evaluating and improving the system.

●6. Non-Federal users will not have access to the ultimate sources of injury information, since these names must remain confidential. However, all other parts of *the raw data should be available, and flexible, retroactive search capabilities should be included.*

The adequate collection, compilation, and distribution of data related to injuries is one of the most important and constructive steps which can be taken to build a rational approach to the improvement of product safety. The expansion and improvement of injury information systems in the Consumer Product Safety Commission deserves wide attention and support. The Sub-Council therefore recommends the following:

RECOMMENDATION 4

THE CONSUMER PRODUCT SAFETY COMMISSION SHOULD PLACE HIGH PRIORITY ON THE COMPLETION OF A COMPREHENSIVE NATIONAL PRODUCT INJURY DATA SYSTEM TO GUIDE THE IDENTIFICATION AND EVALUATION OF PREVENTIVE MEASURES.

This system should be completed with dispatch, and it should be flexible and open in its operation because it will serve as the principal data base for all sectors of the nation concerned with product safety. Seen in this context, the system is much more than a guide to eventual Federal regulatory action. Since it is a national system, advice should be sought on a formal and continuing basis from all organizations which can contribute to a systems design which will serve both its Federal and non-Federal users. To carry this out, the Sub-Council recommends:

RECOMMENDATION 5

AN ADVISORY COMMITTEE ON PRODUCT INJURY DATA SHOULD BE ESTABLISHED WITHIN THE CONSUMER PRODUCT SAFETY COMMISSION, INCLUDING MEMBERSHIP FROM FEDERAL AND NON-FEDERAL GOVERNMENTAL UNITS, THE PRIVATE SECTOR AND THE PUBLIC.

The Act establishing the Consumer Product Safety Commission contains provisions for a general advisory committee to the commission.* The Sub-Council's recommendation concerns a more focused, technical effort, which could be established separately or as a sub-group under the Committee set forth in the Act.

Many other Federal data programs benefit from advisory committees of experts and users. A similar arrangement for safety data should also be constructive and useful to the system's managers. It can bring a regular, open review to the operation which may help in the early identification of improvements which would contribute to its continuing effectiveness.

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* Section 28, P.L. 92–573 (See Appendix).

Analysis of Collected Data

The safety data should be collected, compiled, and distributed in a form which will allow ready analysis by organizations best equipped to act on the conclusions which follow. Larger corporations will be able to use the data directly. Trade associations will be in the best position to respond with proposals or comments on standards. The advent of a fully operational Federal data system would allow these organizations to use the accident and injury analyses to develop corrective measures. Therefore, the Sub-Council recommends:

"Trade association will be in the best position to respond with proposals or comments on standards."

RECOMMENDATION 6

TRADE AND PROFESSIONAL ASSOCIATIONS ACTIVE IN CONSUMER PRODUCT INDUSTRIES SHOULD ANALYZE RELATED PRODUCT INJURY DATA TO DETERMINE CAUSES, IDENTIFY PREVENTIVE MEASURES, AND COORDINATE RESPONSIVE ACTION.

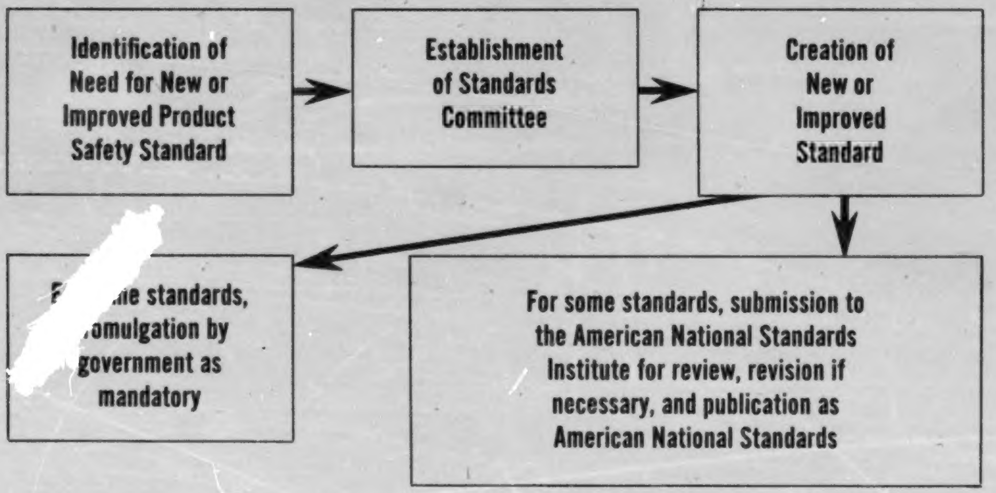
This role will be particularly important to trade associations in those industries which are highly fragmented, and where few companies have the resources to review and analyze the data independently.

Identification of Preventive Measures, Including Product Safety Standards

Injury data is only one part of the information spectrum needed to guide action on product injuries. Cost - benefit analyses, impact analyses, and other studies which relate to the identification and selection of appropriate countermeasures can and should be developed by trade and professional associations for use with appropriate regulatory agencies. The role of corporate leadership is also significant here, since trade associations cannot act quickly and effectively unless industry leadership stands behind these activities. Coordinated industry action appears to be the most efficient way to do this work.

Successfully implemented, a national safety data system will contribute to the improvement of product safety in many ways. However, no area is more dependent on good data than the product standards-making process, as discussed in the next section.

B. Establishing Product Safety Standards


Identification of Need for New or Improved Product Safety Standard
Establishment of Standards Committee
Creation of New or Improved Standard
F[illegible]me standards, [illegible]omulgation by government as mandatory
For some standards, submission to the American National Standards Institute for review, revision if necessary, and publication as American National Standards

Virtually every product which enters the marketplace is affected by one or more standards. These standards assure common description of performance characteristics, common dimension characteristics, and many other factors including the safety of the product's design. Most of these standards flow from the voluntary standards process, a complex system which is not widely understood. The process is characterized by the fact that participation is voluntary, including the choice of what to standardize, representation on the technical group writing the standard, and ultimate use of the standard. As a result, many procedural variations are used in the establishment of voluntary standards. The process of developing a voluntary standard is not and should not be completely standardized.

> *"The process of developing a voluntary standard is not and should not be completely standardized."*

Identification of Need for New or Improved Product Safety Standard

The suggestion for a standard may come from a number of sources. An individual company or a group of companies working through a trade association may take the initiative. Government agencies, consumer organizations, and other institutions which do not actually produce the products involved might point to the need. A professional organization may identify the requirement, or an already established standards committee may decide that a revised version of an existing standard under its jurisdiction is warranted.

Establishment of Standards Committee

The decision to develop a standard and the assignment of the activity to a technical group can be made by a policy board or committee of one of several hundred standards writing organizations. Some organizations maintain standing committees which assume responsibility for new standards needs; others create ad hoc groups for each new standard activity. These committees also play a major role in deciding what not to standardize.

The membership and procedures involved vary considerably. The American Society for Testing and Materials (ASTM), uses a widely representative system where manufacturers of a product under study cannot chair its committee, and may make up only a minority of the committee's membership. ASTM committees currently have over 22,000 members serving in over 40,000 positions. They have stewardship over more than 4,000 ASTM standards currently in use. All negative votes in these deliberations are accompanied by supporting reasons which are thoroughly examined and every effort is made to assure full and complete scrutiny of each point raised. Most committee representatives are employed by the corporate sector, but membership is open to other qualified participants. Since the cost of participation is often high, ASTM has established a $20,000 fund to subsidize additional public interest representatives on an experimental basis. For 1973, a $100,000 budget has been allocated by ASTM for a broad range of consumer-oriented activities.

"ASTM committees currently have over 22,000 members serving in over 40,000 positions."

Creation of New or Improved Standard

Popular terminology uses the word "standard" to encompass several basic elements singly or collectively. These include:

- A. Standard test methods to measure certain characteristics.
- B. Quantified values of the characteristics determined by the test method.
- C. Maximum and/or minimum acceptable values for the characteristics.

In most standards writing organizations, a draft of a new or revised standard covering any or all of these elements is created by a technical group, including technical experts from corporations which have an interest in the product involved. After the draft has been prepared, it is usually given a technical and procedural review by the policy board of the committee that assigned the work, and by higher policy groups or the general membership of the organization. At each review level the draft can be resubmitted to the originating technical committee for comment or redraft.

In general, these voluntary standards procedures are carried out by the following four types of organizations:

●A. Voluntary Standards-Writing and Promulgating Bodies

The American Society for Testing and Materials, the American National Standards Institute, and the Office of Engineering Standards Services of the National Bureau of Standards are unique because their activities are exclusively concerned with standards and standardization.

These organizations have produced about one-third of the voluntary standards that are currently in effect and are writing over a thousand consensus standards annually in a great variety of technical areas. These standards include industrial market product standards and test methods for specific characteristics and materials, as well as standards for consumer goods. Many of the organizations that fall into the other classes listed below are also active on the technical committees of these bodies.

As described in detail later in this report, the American National Standards Institute serves as the coordinating organization for the system, reviewing and promulgating standards submitted to it by other organizations as "American National Standards."

"... the American National Standards Institute serves as the coordinating organization for the system ..."

●B. Professional Societies

Standards are also written by organizations dedicated to the advancement of a profession. These include, for example, the Institute of Electrical and Electronic Engineers, the Society of Automotive Engineers, the American Society of Heating, Refrigerating and Air-Conditioning Engineers, and the American Society of Mechanical Engineers.

Other professional societies, such as the American Society for Quality Control, serve as consultants to the specific discipline or product-oriented groups to help design statistically valid experiments, to recommend correct sampling procedures, and to advise on proper statistical analysis of the data.

Standardization activities of these organizations generally focus on technical product characteristics, such as definitions, test methods, terminology, and symbolic representation. These groups have produced over 30 percent of the voluntary standards that are currently in effect and they are writing over 500 new standards annually.

● C. Trade Associations

Organizations serving industry groups such as the Aerospace Industries Association of America, the Gas Appliance Manufacturers Association, the American Gear Manufacturers Association, the Electronic Industries Association, the National Electrical Manufacturers Association, and the Association of Home Appliance Manufacturers, are also involved in the industrial standards process.

Trade association standardization activities are almost exclusively product-oriented. They have produced about 30 percent of the voluntary standards that are currently in effect and are writing over 300 new standards annually.

● D. Product Testing and Certifying Agencies

A number of consumer product testing and certifying agencies also sponsor or develop product safety standards. Examples include the American Gas Association Laboratories, the National Sanitation Foundation, and Underwriters' Laboratories, Inc.

The standards produced by these organizations normally represent requirements which they deem essential to their mission, such as serving the safety interests of the public. They are the basis for the testing and subsequent listing or certifying services of these agencies. Each organization has a distinctive symbol which is used on products which comply with its requirements.

While the total number of standards produced by these organizations is but a small percentage of the voluntary standards in existence (industrial, commercial, and consumer product types), they nevertheless comprise 60% of the available consumer product safety standards identified by the National Commission on Product Safety. The likelihood of their adoption with or without modification make them of particular importance to manufacturers of consumer products.

The total number of organizations included within these four standards-writing categories exceeds 400. They have produced over 20,000 standards now in use in the United States.

The time required to establish and revise a standard by these organizations varies widely, but on the average it takes about 2 years to move from the assignment of a standard-writing project, to a technical committee, to ultimate approval and publication. For standards relating to dimensions, nomenclature, symbols, and many other characteristics which contribute to efficiency and product compatibility, this is not an inordinately long time to spend to complete a standard. For some critical safety standards however, this time can and should be shortened. The procedures administered by the new Consumer Product Safety Commission include time limits for the creation and promulgation of mandatory standards once the need has been established.*

In this voluntary system of hundreds of organizations and thousands of standards, no clear distinction can be drawn which will allow separate treatment of those parts of the network which relate only to safety. Some standards are clearly safety standards, but for a large number of voluntary standards, safety matters are rarely completely severable from all other considerations. In the voluntary standards system they are inherent throughout the processes involved. In one sense, virtually all standards are safety related because they affect consumer awareness and use of the products involved, often in unpredictable ways. For example, proper quality of construction is required in most products to prevent unexpected and unsafe failures. That quality can be determined by the quality of the governing standards, and the systems established to assure compliance with them.

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* Sections 7, 9, 10, 11, 12, P.L. 97–573 (See Appendix).

This lack of a sharp, mutually exclusive division between safety and non-safety standards requires that the entire voluntary standards system be considered as a focus for improvement if this process is to contribute to better product safety.

For some standards, promulgation by government as mandatory

As mentioned earlier, most mandatory standards evolve from previous voluntary versions, usually without substantial revision. Thus, a vigorous voluntary standards system is a complementary and useful adjunct to a mandatory system. This will be as true under a comprehensive Federal regulatory system as it was previously.

". . . most mandatory standards evolve from previous voluntary versions, usually without substantial revision."

But how can a diverse system with hundreds of participating organizations be improved? The answer lies with central leadership and coordination, and that points to the organization specifically designed to carry out this responsibility—the American National Standards Institute.

For some standards, submission to the American National Standards Institute for review, revision if necessary, and publication as American National Standards

The central coordinating body for the entire system of voluntary standardization in the United States is the American National Standards Institute (ANSI). ANSI is a non-profit federation of standards-writing organizations which was created by ASTM, the National Bureau of Standards, and others in 1918 as the American Engineering Standards Committee. Since that time, it has passed through several major reorganizations and name changes in a series of attempts to raise its stature and obtain broader support.

Unlike all other standards organizations, ANSI's basic purpose is not to write original standards, but to administer procedures which lead to the promulgation of standards from various sources as "American National Standards." This procedure includes public notification to allow comments on the standards being processed. In addition, for organizations which do not have broadly representative membership on their standards-writing committees, ANSI specifically canvasses an additional sampling of interested parties to determine whether there is "consensus" on the standard prior to its promulgation as an "American National Standard." In some selected cases, ANSI has assumed the entire responsibility for creating and promulgating standards, but this function has declined in favor of deferring standards development to other groups wherever possible.

In addition to providing this domestic service, ANSI also provides representation for the nation's voluntary standards interests on several non-treaty international standards bodies. This responsibility has become increasingly important since product standards have become more and more global in nature.

Although largely unseen, ANSI's activities are services which are valuable and necessary to the voluntary standards system. Its basic mission includes:

● 1. Leadership in identifying needs for new or revised standards.

● 2. Encouragement to organizations of competence to fill these needs, and assistance in the establishment of effective procedures to lead to good standards.

● 3. Central coordination of all voluntary standards activities, including guidelines for the standardization process itself, and steps to upgrade procedures wherever possible.

● 4. Administration of procedures for national consensus on proprietary standards prepared by other organizations.

● 5. Assurance that United States voluntary standards interests are appropriately represented in international standards-setting activities.

"These responsibilities require voluntary support from many sources..."

These responsibilities require voluntary support from many sources, especially those organizations which benefit from an orderly process of standards generation. An examination of ANSI from this perspective points up a number of strengths and weaknesses. ANSI's strong points include:

● 1. *It is an established, experienced organization with deep roots in the standards community.* ANSI is widely recognized and accepted among standards organizations as the central coordinating body for voluntary standards activities in the United States.

●2. *It is broadly-based.* ANSI's work cuts across all major voluntary standards activities, including consumer products, industrial safety, housing, and construction.

●3. *The quality of its work is recognized by the Federal government.* In two major areas, for example, occupational health and safety, and gas pipeline safety, most of the mandatory standards promulgated by the Federal government have been ANSI standards.

●4. *It provides for the U.S. representation in major voluntary international standards activities.* This activity has been recently strengthened with the opening of a permanent, full-time ANSI office in Europe.

●5. *ANSI has improved its operations and its stature markedly in recent years.* Strong steps have been taken, and more are underway, to effect significant improvements in ANSI's procedures, structure, and services.

In contrast with these positive factors, several weaknesses also are apparent:

●1. *ANSI's financial resources are severely limited.* The $2 million annual budget allows very little room for executing its total mission once the operating costs related to processing standards are met.

●2. *ANSI lacks broad corporate support.* Only a small fraction of the corporations whose standards needs are served by ANSI support the organization through membership.

●3. *ANSI lacks direct government support.* The Federal government does not hold membership in ANSI even though many agencies have deep interests in voluntary standards and participate in ANSI's activities at the working level.

●4. *ANSI's own standards for the promulgation of American National Standards could be upgraded.* The representativeness and quality of the procedures used by organizations which submit standards to ANSI could be improved, but ANSI does not have the resources needed to accomplish this.

At present, ANSI's income is derived largely from the sale of copies of its standards, special projects, and support by individual corporate members. Its expenditures are allocated to the administrative and housekeeping responsibilities related to the processing of standards. The Sub-Council has concluded that ANSI's budget should be substantially increased if it is to begin to act effectively in carrying out the complete range of responsibilities described above.

Most of ANSI's services are directed at the corporate sector, and it is this area which should pay for the needed strengthening of the organization. Many corporations do not join ANSI directly, but enjoy its services through trade association memberships in ANSI. Thus, ANSI is left in the position of seeking additional funds to carry out its new responsibilities on an ad hoc project-by-project basis. This approach cannot lead to a strong and healthy organization. A restructuring of ANSI's base of support is required.

"A restructuring of ANSI's base of support is required."

To bring this about, the Sub-Council has concluded that:

RECOMMENDATION 7

THE AMERICAN NATIONAL STANDARDS INSTITUTE SHOULD SEEK NEW FINANCIAL SUPPORT ARRANGEMENTS WITH THE ORGANIZATIONS IT SERVES TO PROVIDE ADEQUATE FUNDS FOR MANAGEMENT AND COORDINATION OF THE NATIONAL VOLUNTARY STANDARDS SYSTEM. CORPORATIONS AND TRADE ASSOCIATIONS SHOULD SUPPORT THIS EFFORT.

One effective method of increasing this support would be a requirement that organizations which directly *or indirectly* seek and use ANSI's services pay at least a minimum membership fee in the organization. For instance, corporate support of ANSI by all members of an association might be a prerequisite to the provision of ANSI's services in the promulgation of the association's standards as national consensus standards, or use of ANSI certification marks. Thus, trade associations would have to assure that their members are also members of ANSI if ANSI's services are to be made available. At ANSI's current dues structure for corporate members—$100 per year, plus $5 for each $1,000,000 in domestic sales—this would be a reasonable and equitable way to spread the burden of support.

Alternatively, ANSI might encourage *all* its corporate members to join ANSI through a trade association rather than remain as separate corporate members.

A program like this should result in a sharp increase in corporation support for ANSI. The additional resources available to ANSI could result in the following benefits:

●1. ANSI could *pay for representatives who directly represent consumers on standards committees.* ANSI's committees and other operations are open to public scrutiny at any time. However, there are few consumer advocates with the resources and the technical background required to participate in ANSI's work. As a result, consumer representatives are largely suspicious of the voluntary standards system. They, and other competent participants with non-commercial biases, should be on the inside, participating, rather than outside, criticizing. To accomplish this, ANSI could cover the expenses for qualified "consumerist engineers" from universities, government agencies, consumer groups and other institutions in a position to broaden representation on standards committees.

"ANSI could cover the expenses for qualified 'consumerist engineers' . . . to broaden representation on standards committees."

●2. ANSI could begin to *create a broad range of services directed at improving corporate standards activities.* This could include publications and other programs which would serve to increase the understanding and effectiveness of the voluntary standards process.

●3. ANSI could *strengthen its international activities* so that the standards which have been developed and used for the production of American products are adequately considered in foreign standards-setting deliberations. The consumer is served by these activities, particularly with respect to product safety. American products which comply with voluntary safety standards suffer from the competition of imports which do not meet these standards and thus are less expensive to produce. This problem does not exist for mandatory standards, since they cover all products in the marketplace regardless of where they are produced. The only way at present to correct the voluntary standards imbalance is to incorporate American voluntary standards into similar international standards, a role which ANSI should be encouraged to place at a high priority level.

From a purely economic point of view, the U.S. failure to actively participate in this arena has reduced our ability to compete internationally. A number of foreign regional alliances are being forged to establish integrated standards systems. Adoption of separate standards by these government-sanctioned units will mean continuing loss of export sales for U.S. corporations, as well as a reduction in the job opportunities available to American workers.

●4. A quality system for the timely establishment of a standard requires competence at every step in its procedures, not just at the end. ANSI could use its new resources to *assist and encourage organizations to take the steps needed to upgrade their procedures for creating standards* so that they more closely approximate true national consensus standards prior to submission to ANSI.

●5. ANSI could take steps to *speed up the standards-writing process* when there is an urgent need for a new standard. The time required might be reduced through continuous meetings by the standards-writing body, simultaneous ANSI "consensus" review, and other procedural revisions.

ANSI is a necessary technical component of the American system of production, but it is largely unrecognized outside of the standards community, even within its corporate members' organizations. It is unrealistic for ANSI to hope for an expansion of its membership among companies which receive its benefits whether they join or not. The above recommendation, or some similar arrangement, would be a sensible investment by the nation's corporations. If successful, it could produce better standards relating to the safe design and use of consumer products.

"It is unrealistic for ANSI to hope for an expansion of its membership among companies which receive its benefits whether they join or not."

Federal Membership in ANSI

To broaden its effectiveness and utility as coordinator of the national voluntary standards system, ANSI should also have support from Federal agencies with interests in product standards. Many hundreds of government employees now serve on ANSI committees, including its Board of Directors, but no Federal agencies have elected to join ANSI as organizational members. This step has been recommended by the Federal Interagency Committee on Standards Policy and is long overdue.

ANSI standards, and the standards practices it affects throughout the nation, are directly relevant to the operating missions of many Federal agencies. These agencies should participate directly in ANSI as members, to raise the level of national attention to the voluntary standards process and to allow ANSI to strengthen the quality and scope of its services. The Sub-Council therefore recommends:

RECOMMENDATION 8

FEDERAL AGENCIES WITH NEEDS AND RESPONSIBILITIES RELATED TO VOLUNTARY PRODUCT STANDARDS SHOULD JOIN THE AMERICAN NATIONAL STANDARDS INSTITUTE.

Federal agencies, in their own interest, now join countless private and quasi-public organizations. Joining ANSI would be no different. The Federal funding involved would amount to only a small portion of the ANSI budget, but this action would place all the major institutions in the nation concerned with voluntary product standards into a proper relationship. Most importantly, it would assist in the organization and focus of ANSI's operations so that it can act from a truly national point of view in carrying out its standards coordination responsibilities. It should be noted that government membership in ANSI for the purpose of participation in the voluntary standards process in no way implies official approval of ensuing ANSI standards. The system produces *voluntary* standards and the concern here is with their quality and the range of their applicability.

A National Voluntary Standards Management Organization

The analyses and recommendations above cover actions which the Sub-Council believes should be undertaken immediately. In the longer range, it would be desirable to give serious consideration to the reinstitution of the American National Standards Institute as a quasi-public organization, with a Federal charter.

One of the strengths of the American system of government is its ability to create institutions, neither solely government nor solely private, which specifically respond to an opportunity to strengthen public services. The establishment of Comsat, Amtrak, and the U.S. Postal Service are recent examples of this flexibility in designing management systems for public programs. The Sub-Council believes that a similar institution which combines the strengths of both the government and the private sector, with neither dominating, is the

"...[combining] the strengths of both the government and the private sector ... is the best long range structure ..."

best long range structure for the voluntary standards system.

This would give the nation a standards management organization with the strength and stature to act firmly and effectively in the public interest in the domestic and international forums on voluntary standards. A national dialogue including all affected parties should begin to address this more permanent arrangement. In the Sub-Council's judgment, these deliberations should be initiated jointly by interested Federal agencies and ANSI, and at a minimum they should include Federal, state, and local agencies, prominent standards-writing bodies, the corporate sector, consumer representatives, and any other individuals or organizations with an interest in the outcome.

Corporate Voluntary Standards Responsilities

In view of the importance of the standards problems discussed in this report, corporations should reconsider the placement of standards responsibilities within their operating structure. In most organizations, standards responsibilities are left at the operating level and are rarely effectively coordinated in top management, nor are these responsibilities often visible in the front office.

Standards are rapidly becoming major national issues in virtually all product areas. This calls for priority attention on a regular basis by top management in manufacturing firms on the issues and activities in this area. With this in mind, the Sub-Council recommends:

RECOMMENDATION 9

SENIOR CORPORATE MANAGERS SHOULD REGULARLY REVIEW STANDARDS ACTIVITIES AND SHOULD INVOLVE THEIR CORPORATIONS IN INDUSTRY, NATIONAL AND INTERNATIONAL STANDARDS ACTIVITIES.

"... corporate support and understanding at the highest levels are necessary parts of an effective system."

Organizations active in the standards area find that corporate support and understanding at the highest levels are necessary parts of an effective system. If the voluntary standards system is to be preserved as a major source of product standards, this attitude must be more broadly adopted.

Standards activities in many corporations are seen as dull, prosaic, and part of the support mechanism for the engineering function. All this is probably appropriate for most "in-house" standards. But when safety is involved, or when industry-wide or government standards become an issue for the company, new mechanisms and a new level of interest are in order. The existing corporate standards activities will not automatically encourage this new form of involvement. Therefore, corporation chief executive officers and other top management officials should see to it that they are informed about the standards activities which take place in their organizations, and about the national product standards deliberations which are important to their companies, their industries, and their customers.

Trade Associations and Product Standards

Trade associations are responsible for approximately one-third of the voluntary standards now in existence in the United States. As efforts to produce more and better standards accelerate, the importance of the trade association in this process will increase.

Traditionally, many trade associations have been reluctant to take a forceful hand in stimulating the creation of product standards which relate to safety. In some instances this has changed dramatically in recent years, but overall, this type of standards writing is still a new activity for many trade groups.

Opportunities exist for these organizations to play a leading role in the development of standards that are in the interest of their industries and the public. This will become particularly apparent when the national data system now being constructed by the Federal government reaches full operational status. Trade associations are among the few institutions which will be regularly capable of analyzing the data produced and translating the resulting conclusions into product standards. From an operational point of view, the government will be unable to deal separately with every producing corporation on the technical aspects involved in considering the need for, and the creation of, standards for specific products. This points to the need for trade associations to develop the commitment and organize the technical competence to identify and carry forward these standards-development responsibilities. The Sub-Council therefore recommends:

RECOMMENDATION 10

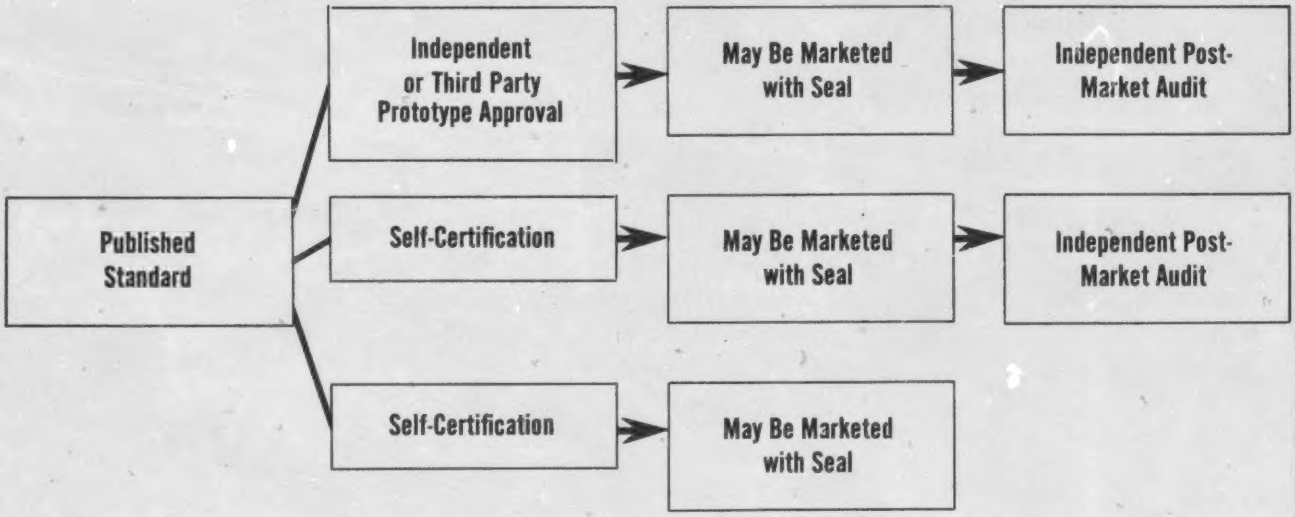
TRADE ASSOCIATIONS SHOULD GIVE PRIORITY TO INDUSTRY-WIDE VOLUNTARY STANDARDS ACTIVITIES RELATING TO THE SAFETY OF CONSUMER PRODUCTS.

This leadership can take a variety of forms. In the largest and most technically proficient trade associations, the creation of proposals for original standards can be directly administered. In other cases, an outside technical or professional organization might be used to create the standards. Whichever route is used, the trade association will often be charting new ground and the broadest possible input should be sought. Ideally, all throughout, the process should be open to public participation.

> *"... all throughout the process should be open to public participation."*

The Consumer Product Safety Act provides the opportunity for interested and competent organizations to develop proposed product safety rules after a finding of need has been published. Some trade associations will find it appropriate to organize to do this work on an industry-wide basis. Additionally, after a proposed rule has been developed and published there is an opportunity to comment to the Commission on the proposal prior to its promulgation as a mandatory standard. Trade associations should also be prepared to present industry information and analyses at this point in the standards-development process.

C. Certifying Compliance with Standards


Published Standard
Independent or Third Party Prototype Approval
May Be Marketed with Seal
Independent Post-Market Audit
Self-Certification
May Be Marketed with Seal
Independent Post-Market Audit
Self-Certification
May Be Marketed with Seal

TYPICAL PRODUCT CERTIFICATION SYSTEMS

Once effective standards have been established for a product, the fact that it conforms to the standard must be communicated to the retailer and to the consumer. Product certification systems provide an effective means of communicating this information. This certification informs the consumer, and all others responsible for purchasing between the manufacturer and the consumer, that the product meets certain safety or other standards as prescribed by appropriate test methods. A voluntary certification system provides the consumer with a guideline other than price on which to base his buying decision.

The consumer benefits from certification which educates him to important features of new products or new features of old products. In addition, increased use of certification provides incentives for all producers to improve their products.

There is a growing recognition of the consumer's need for more factual information concerning the product that he is purchasing, and of the responsibility of the producer to provide such information in a manner that will permit the consumer to exercise an informed choice among competing products. At the present time there are a number of products which commonly carry "seals" or "marks" of certification and the use of these systems could be increased.

To improve the effectiveness of existing and potential certification systems, producers should provide information on the nature of the characteristics being certified. In some cases this can be provided in the literature that normally accompanies the product at point of sale. Over time, the consumer will more easily recognize, and probably select, certified products, thereby increasing the relevance of voluntary standards. To be realistic, it should be understood that the degree to which complex standards and certification criteria can be translated into terms meaningful to typical consumers is sharply limited.

The present product certification situation is complex since many organizations—government, private, and nonprofit—are involved. This is primarily a result of their roles in setting or approving standards, the process which is a prerequisite to product certification. Testing and identifying products to indicate they conform to standards for safety and performance is required under many regulatory programs, ranging from mandatory Federal acts to state and local codes. In other cases, individual companies voluntarily use certification procedures which have achieved visibility and credibilty in the marketplace. Consequently, consumers have come to recognize a variety of certification marks, some of which represent safety characteristics. Others represent quality characteristics and some represent ratings or definitions of characteristics.

There are basically three types of certification: independent certification, self-certification with independent audit, and self-certification. Independent certification involves the use of an outside organization to determine whether products comply with the standard. Typically, an independent or third party certification system involves:

- 1. Testing a prototype against the standard.
- 2. Follow-up inspection and/or testing of products obtained from the manufacturer's plant, or from the open market.
- 3. Corrective action to be taken in the event that deficiencies are discovered.

When using self-certification with independent audit the manufacturer assures himself that the product complies with the standard and assures his customer of that fact. Later, an independent agency, perhaps the government or some designated laboratory, performs audit tests on samples of the product taken from the open market as an extra check on the manufacturer. In the case of self-certification this last audit step is not used.

The Consumer Product Safety Act prescribes a certification system which is essentially a system of self-certification with independent audit. Once mandatory standards have been promulgated, the manufacturer must issue with his product a certificate of compliance with the standards. This certification must be based on a test of each product or on a reasonable statistical testing program. The Act also provides for optional independent, third party certification procedures. In addition, the Commission may require submission by manufacturers of performance and technical data required to carry out the purposes of the Act.*

The following represent typical certification programs currently in use.

Outdoor Power Equipment Institute (OPEI)

OPEI requested the American National Standards Institute to initiate a project for the development of a mechanical safety standard for power operated lawn care equipment, and the first such standard was published in 1960. Revisions of that standard were adopted in 1964, 1968, and 1972.

As part of this program, OPEI adopted, and made available to all manufacturers, a triangular label to be affixed to each power mower indicating compliance to the standard. Originally, this label represented the manufacturer's self-certification of compliance to the safety standard. However, some manufacturers used the certification label on models which did not meet the standard, and early in 1970 self-certification was abandoned. OPEI revised its label and instituted major changes in the program. Now, in order to display the official OPEI certification mark, the manufacturer is required to submit models of his mowers to an independent testing laboratory for a compliance check and allow periodic audit tests and evaluations at the manufacturing site. In the first year of this program, over 2,000 models of lawn mowers submitted by 44 manufacturers were tested and approved. These models represented approximately five million lawn mowers or about 90% of total industry production.

Bicycle Manufacturers Association (BMA)

BMA is a trade association whose members produce 80%-85% of all domestic bicycles. Its safety program utilizes a comprehensive standard for regular bicycles manufactured by member companies. Compliance with the standard is a condition of membership in the BMA. Non-members may also participate in the program under the same terms and conditions as BMA members.

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* Sections 14, 16, P.L. 92–573 (See Appendix).

An independent testing laboratory has been designated by BMA to be responsible for inspecting bicycle models submitted for certification and also for random in-plant inspections of production quality control techniques. Once the laboratory has approved a manufacturer's model, the manufacturer is allowed to affix a certifying label to each product. To date, more than 2,000 bicycle models have been certified for compliance to the BMA standard.

Architectural Aluminum Manufacturers Association (AAMA)

In December 1962, the American Standards Association (now ANSI) was requested by the Public Health Service to establish a committee to develop a standard for architectural safety glazing materials. A standard was completed in 1966 and incorporated into the existing AAMA-sponsored quality assurance certification program for aluminum prime windows, sliding glass doors, and aluminum combination storm windows and doors.

This certification program is independently administered by Electrical Testing Laboratories, Inc. (ETL). The program requires that initial tests to the applicable ANSI standards be conducted by one of 12 independent testing laboratories. Certification for products tested remains valid only as long as the product continues to be listed in the Association's quarterly certification directory.

To assure continuing compliance, ETL conducts periodic in-plant, unannounced inspections. ETL also inspects and approves the independent testing laboratories that perform initial tests.

Underwriters' Laboratories (UL)

One outstanding example of certification by an independent testing organization is the program of Underwriters' Laboratories. This firm has been setting product safety standards and conducting independent testing since 1894.

This quasi-public organization draws its members and Board of Trustees from the following categories: (a) insurance, (b) consumer, (c) governmental body or agency, (d) education, (e) public safety body or agency, (f) safety expert, (g) standardization expert, and (h) public utility. No interest category may exceed one-third of the Board membership at any time.

The majority of underwriters in the United States, and many Federal, state, and municipal authorities, plant operators, architects, building owners and users either accept or require listing by Underwriters' Laboratories as a precondition to their recognition of devices, systems, and materials bearing upon life and fire hazards, and upon theft and accident prevention.

UL presently has over 13,000 clients who have entered into a legal agreement with UL concerning the conditions under which UL's registered name or mark may be used on a product. Its Listing Mark, which serves to identify products meeting its safety requirements, was used on several thousand product lines covering an estimated two billion products in 1971.

One of the characteristics of UL's program is its follow-up service, which provides, through plant inspection and testing of market samples, a continuing audit of the manufacturer's compliance with the requirements.

UL's standards are "Standards for Safety." Published standards are developed through a process of discussion with manufacturers, inspection authorities, governmental bodies, consumers, insurance interests, educators, safety experts, and other segments of the general public. As a matter of policy, UL submits its standards to ANSI for approval as American National Standards.

UL's Standards for Safety are frequently revised to recognize advances in the art or to provide higher levels of safety which field experience indicates are desirable. When a standard is revised, all future production must conform to the revised standard before it can bear the UL Listing Mark.

U.S. Testing Company (U.S.T.C.)

U.S.T.C. is another example of an independent laboratory that conducts testing for certification. It will test virtually any product on a fee basis. If the product passes the tests, the U.S.T.C. name may be used by the manufacturer. Nationwide Consumer Testing Institute, a subsidiary of U.S.T.C., issues a Quality Certified Seal, its formal emblem of approval, if a product passes both a premarketing, laboratory testing phase and a "quality audit program," which is a testing of the product over a period of one to two years, as it appears in the marketplace.

American National Standards Institute, Inc. (ANSI)

As described earlier, ANSI acts as the primary coordinating organization for the voluntary standards system. In recent months ANSI has amended its Constitution and By-laws to permit it to perform the same function for voluntary certification. In the same manner that ANSI approves and coordinates voluntary standards, it is now empowered to accredit and coordinate voluntary certification programs.

ANSI's Certification Committee develops policy and procedures covering accreditation for all generally recognized forms of certification programs, third-party as well as self-certification, which are required in the new Consumer Product Safety Act. The new ANSI certification procedures, when approved, will contain a specific list of criteria a program must meet to qualify for ANSI accreditation. Not only will the ANSI program call for the initial qualification of a program, but it will also require a continuing monitoring by ANSI to assure that the program remains satisfactory. Certifiers who want ANSI accreditation are urged to rely heavily on quality assurance programs of their licensees to assure a properly operating program.

ANSI will do no actual product certification of its own; instead it will "certify the certifiers," so that a broadly recognizable national symbol can be available for use by other certifying organizations This is a particularly important service for smaller, specialized certifying programs which could not hope to achieve national recognition for their symbols.

Self-certification programs with and without independent audit stand to benefit as well from the establishment of a more coordinated national approach. The Sub-Council on Product Safety therefore recommends:

RECOMMENDATION 11

THE AMERICAN NATIONAL STANDARDS INSTITUTE SHOULD PROVIDE THE COORDINATION AND PLANNING NECESSARY TO IMPROVE AND EXPAND VOLUNTARY PRODUCT CERTIFICATION SYSTEMS.

For this program to be successful, it will be necessary for ANSI to implement the strengthened funding procedures recommended earlier in this report. This, plus the recommended additional government and consumer representation in the organization, should render ANSI more effective in administering the quasi-public responsibilities associated with an effective nationwide certification coordination program.

Laboratory Accreditation

One final step remains in the development of an effective national certification program. If there is an increase in the use of certification systems there will be a concurrent increase in the workload of testing laboratories. Existing laboratories have significant expertise in many areas but to assure the effectiveness of the total system there may be an emerging need for a way to accredit or certify the competence of testing laboratories. At present, no system exists to carry out this function.

"One final step remains in the development of an effective national certification program."

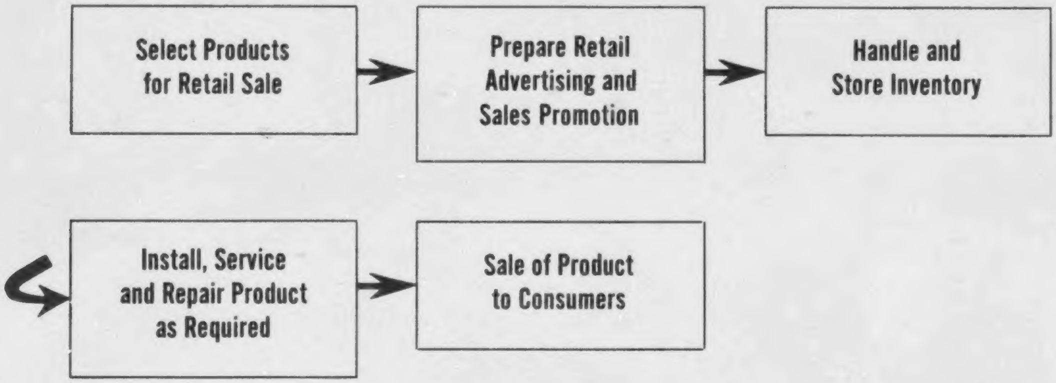
An entirely new approach is called for, and the Sub-Council believes that the Secretary of Commerce is the appropriate individual to begin the national dialogue on this matter as stated in the following recommendation:

RECOMMENDATION 12

THE SECRETARY OF COMMERCE SHOULD INITIATE ACTION TO EVALUATE THE MERITS OF ESTABLISHING A QUASI-PUBLIC NATIONAL TESTING LABORATORY ACCREDITATION BOARD.

In the Sub-Council's view, if established, this National Laboratory Accreditation Board should be made up of public, government, corporate, professional, and consumer representative appointees and it should be administered in close cooperation with the Consumer Product Safety Commission so that it can assist wherever appropriate in assuring product safety. The Board's function, however, would be cast more widely across voluntary standards and testing systems. The Board should set the policies, criteria, and general procedures required to administer the program, for both manufacturers' and independent laboratories. Funding for the Board could come from income received from a testing and accreditation fee structure, possibly supplemented by direct government support.

Chapter III. Retail and Service Activities and Product Safety


Select Products for Retail Sale
Prepare Retail Advertising and Sales Promotion
Handle and Store Inventory
Install, Service and Repair Product as Required
Sale of Product to Consumers

Select Products for Retail Sale

Selection of the product lines for retail sale rests largely with the many tens of thousands of large and small retailers across the nation. Often, they are the only link between the manufacturer and the consumer, and as such they carry the responsibility to assure that only safe products are chosen for retail sale. Seen from this perspective, the retailer is in fact the "consumer's buying agent," and not just an outlet for manufacturers' products.

"... the retailer is in fact the 'consumer's buying agent,' and not just an outlet for manufacturers' products."

In some cases, the retailers' problems are minimal in rejecting unsafe products. If he is large enough, he may have his own test laboratory to review each new candidate for his shelves. For some items, particularly electrical equipment, visible certification marks affixed to the product can be relied on to denote compliance with existing safety requirements. In still other cases, the product may be so simple and unhazardous that safety is not a major issue in its selection for retail sale.

However, some products require a more careful review. Toys, for example, are manufactured by approximately 1,000 firms in the United States, and, in addition, a substantial portion of the supply is imported from abroad. It is especially important to insure that all imported products meet the same safety criteria as domestically produced products. In most cases, there are no certification programs which apply, but there does exist a gradually growing body of Federal mandatory standards governing safe toy design. How, then, is the retailer to be sure that the products he selects are in compliance? The same question applies to other products covered by mandatory or voluntary safety standards.

One answer to this problem is set out in the following recommendation:

RECOMMENDATION 13

DISTRIBUTORS AND RETAILERS OF CONSUMER PRODUCTS HAVE THE RESPONSIBILITY TO ASSURE THAT THEIR PURCHASING PERSONNEL UNDERSTAND APPLICABLE MANDATORY AND VOLUNTARY SAFETY STANDARDS AND THEIR SUPPLIERS' COMPLIANCE POLICIES.

To this end, retailers should establish training procedures for their buyers to be sure they are up-to-date on mandatory and voluntary safety standards and related safety matters involving their product lines, to minimize the chance that unsafe products will be inadvertently offered to customers for sale.

Some information on safety is available through distributors and it is likely that the quantity and quality of that information will increase. Retail trade associations have an opportunity to increase services to their members in this area. The potential contribution of recognizable safety certification mechanisms is apparent.

The retailer also can act as a key link in the chain of transfer of consumer safety information back to the manufacturer for his use in improving product designs. In many cases, this knowledge exists in the retail staff or is collected through consumer complaints and other contacts. A formal set of procedures for the organization and transmission of this information to manufacturers is often all that is needed. Retailer safety, training, and operating policies should recognize the value of this data and incorporate steps to provide it to suppliers as an incentive for product improvement.

"The retailer also can act as a key link in the chain of transfer of consumer safety information back to the manufacturer . . ."

Handle and Store Inventory

Just as manufacturers take care to properly package, store, and ship their products, the retailer needs to properly handle and store the merchandise he receives.

The first step in this process is inspection for visible shipping damage, before the product is placed in inventory. Once in storage, warehouse conditions can become a problem. Damp storerooms can create conditions which allow corrosion of critical components to occur in inaccessible and undetectable areas of complex products. Animal wastes can produce chemical compounds which may corrode electrical devices and contribute to eventual failure. Many other subtle phenomena can occur to reduce the safety of products while they await sale by the retailer, so safe storage cannot be taken for granted.

In addition to attention to the conditions of storage, product inventories should be turned over systematically to avoid prolonged exposure to environments such as those mentioned above.

Prepare Retail Advertising and Sales Promotion

The safety principles associated with manufacturer advertising cited in Chapter I also apply to the retailer. See pages 23-24.

Sale of Product to Customers

Many consumers rely on retail sales personnel for information on products at the time of purchase. Sometimes the consumer needs safety information, therefore sales personnel should be informed on the safety characteristics of product lines within their purview.

This training should be designed to include specific information on safety aspects of the products involved, and an identification of sources of information which might be needed to reply to customer inquiries.

Install, Service and Repair Product as Required

The correct installation and repair of a product can often be as important as its safe manufacture. In particular, as a part of installation and repair procedures, steps should be incorporated to assure adequate safety checks on the product. Installation and service personnel employed by retailers need technical training to develop the necessary competence. The use of factory operated training schools and formal certification of personnel are programs which should be considered to accomplish this end.

In the installation of many products, local, state, and Federal codes must be followed. The future will certainly see an increase in these codes and standards, not only in number but in complexity. This will require retailers to continually review the changing requirements for each area in which they sell products. Continuing retraining programs will often be necessary as the codes, or the product lines they cover, change.

As in the case of the retailer, installation and service activities are prime sources of feedback information on the safety record of products in actual use. The collection and dissemination of this information should be a standard part of the operating procedures for product servicing.

Contract Sales

A significant and increasing proportion of products reach the consumer through routes other than the retail market. The major channel in this area is "contract" sales, to builders, businesses, and other organizations. The products which flow through this route often end up in homes, offices, and other locations where they are used by consumers.

The safety principles stated throughout this report apply equally to such non-retail markets. These manufacturers, distributors, and other businesses should consider this report's recommendations and guidelines in the interest of reducing mishaps involving consumer products wherever they might occur.

Chapter IV. Public Safety Awareness Programs

This report has focused on activities related to product design, manufacture, and sale, but the greatest opportunity for reduction in the frequency of personal injury related to consumer products lies with individuals and their behavior. Many estimates have been made of the opportunity for reducing injury by product redesign. These estimates of injury reduction range from a low of 5% to a high of 20%. This means that the remaining 80% to 95% of total injuries can be reduced only by changing human behavior. Therefore, it is imperative that the nation focus on this difficult, but significant, area for improvement in public safety.

The sources of information and education which provide the basis for changes in these behavior patterns are widely varied, as are the channels for communication of the information to the public. Exhibit 6 denotes some of the organizations, types of information, and communication techniques involved.

The moment of truth in product safety comes at the "point of use"—when the product is under the control of the user. At that point, everything that has gone before—product design, setting of standards, factory inspection, certification—amounts to nothing if the consumer unreasonably misuses the product, or fails to understand its safety characteristics. Communication and education then become the keys to improved product safety.

The country's most experienced organization in the area of safety communication is the National Safety Council (NSC). The Council was established nearly 60 years ago on the premise that industry was responsible for occupational safety and had sound social and economic reasons for doing the best practicable job. Since that time, the National Safety Council has carried out a wide variety of safety information and accident prevention programs, in cooperation with industrial and other organizational members and through its network of over 250 state and local safety organizations. With the increased public concern for safety in all product areas, the NSC could undertake a similar position of national leadership in a coordinated and expanded program of consumer safety education.

The education of large numbers of people is complex and can have results which are exceedingly difficult to measure. Experience does indicate, however, that repetition and credibility in the message offered to the public on safety matters is probably essential to any meaningful change in consumer behavior patterns. In addition, to be most effective, the many parts of a total program require skillful integration to achieve optimum results. With this in mind, the following principles should be applied to a comprehensive product safety public awareness program:

●1. *The subjects which deserve priority attention should be determined jointly by all institutions concerned.*

●2. *Product safety communication programs should focus on selective areas, and be presented to the public on a coordinated basis.*

●3. *Safety messages associated with any campaign should be concentrated in each communication channel selected for the project.*

●4. *A continuing attempt should be made to broaden the range of communication channels which carry product safety messages.*

In view of the need for this coordinated national approach, the Sub-Council recommends the following:

RECOMMENDATION 14

THE NATIONAL SAFETY COUNCIL SHOULD CREATE AND COORDINATE A COMPREHENSIVE PRODUCT SAFETY COMMUNICATIONS PROGRAM FOR CONSUMERS.

The initial effort in this activity should provide a comprehensive description of the audiences for safety messages, the channels to these audiences, and the content of the messages to be transmitted. Building on its extensive experimentation in other areas, the NSC is an appropriate organization to address itself to this important task. A program of this type deserves strong support from government, businesses, trade associations, and all others interested in public safety.

Exhibit 6

PRODUCT SAFETY ACTIVITIES FOCUSED ON CONSUMER BEHAVIOR

Source of Communications	Individual Companies and Trade Associations	Media	Educational Institutions, National Safety Council, Government: Federal, State, and Local
Channels for Communications	Product Advertising Corporate Advertising Use & Care Manuals Product Tags House Organs Packaging Point of Sale Retail Demonstration Salesmen Demonstration Bill Stuffers Product Labels Local Safety Councils Certification Seals Advertising Councils	**Mass Media Channels** Network & Local T.V. Network & Local Radio National Magazines Newspaper Syndicates Columnists Daily Newspapers Television Programming Public Broadcasting Outdoor Billboards Transit Car Cards Editorials Features Interviews Pictures **Specialized Channels** Business Press Women's Pages Teacher's Publications Medical Publications Youth Publications	Seminars Speakers Bureaus Pamphlets Textbooks Classrooms
Targets for Communications	General Public—Buyers and Users Specific Audiences—Parents, Children, Elderly, Disadvantaged, Handicapped, Employees, Etc.		

Chapter V. Conclusion

As these chapters have shown, there are no easy roads to improved product safety. Many organizations, individuals, and institutions influence the outcome with respect to any given product, or any given incident. Reduction in personal injury requires many diverse efforts, ranging from the manufacturers' carefully organized and monitored safety systems design to the ordinary concern on the part of the user for his own safety and that of others.

Strong commitment to the actions recommended in this report is required, if product related injuries are to be held to minimum levels.

APPENDIX

Consumer Product Safety Act
(Public Law 92-573)

Ninety-second Congress of the United States

AT THE SECOND SESSION

Begun and held at the City of Washington on Tuesday, the eighteenth day of January, one thousand nine hundred and seventy-two

An Act

To protect consumers against unreasonable risk of injury from hazardous products, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SHORT TITLE; TABLE OF CONTENTS

Section 1. This Act may be cited as the "Consumer Product Safety Act".

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Sec. 1. Short title: table of contents.
Sec. 2. Findings and purposes.
Sec. 3. Definitions.
Sec. 4. Consumer Product Safety Commission.
Sec. 5. Product safety information and research.
Sec. 6. Public disclosure of information.
Sec. 7. Consumer product safety standards.
Sec. 8. Banned hazardous products.
Sec. 9. Administrative procedure applicable to promulgation of consumer product safety rules.
Sec. 10. Commission responsibility — petition for consumer product safety rule.
Sec. 11. Judicial review of consumer product safety rules.
Sec. 12. Imminent hazards.
Sec. 13. New products.
Sec. 14. Product certification and labeling.
Sec. 15. Notification and repair, replacement, or refund.
Sec. 16. Inspection and recordkeeping.
Sec. 17. Imported products.
Sec. 18. Exports.
Sec. 19. Prohibited acts.
Sec. 20. Civil penalties.
Sec. 21. Criminal penalties.
Sec. 22. Injunctive enforcement and seizure.
Sec. 23. Suits for damages by persons injured.
Sec. 24. Private enforcement of product safety rules and of section 15 orders.
Sec. 25. Effect on private remedies.
Sec. 26. Effect on State standards.
Sec. 27. Additional functions of Commission.
Sec. 28. Product Safety Advisory Council.
Sec. 29. Cooperation with States and with other Federal agencies.
Sec. 30. Transfers of functions.
Sec. 31. Limitation on jurisdiction.
Sec. 32. Authorization of appropriations.
Sec. 33. Separability.
Sec. 34. Effective date.

FINDINGS AND PURPOSES

Sec. 2. (a) The Congress finds that—

(1) an unacceptable number of consumer products which present unreasonable risks of injury are distributed in commerce;

(2) complexities of consumer products and the diverse nature and abilities of consumers using them frequently result in an inability of users to anticipate risks and to safeguard themselves adequately;

(3) the public should be protected against unreasonable risks of injury associated with consumer products;

(4) control by State and local governments of unreasonable risks of injury associated with consumer products is inadequate and may be burdensome to manufacturers;

(5) existing Federal authority to protect consumers from exposure to consumer products presenting unreasonable risks of injury is inadequate; and

(6) regulation of consumer products the distribution or use of which affects interstate or foreign commerce is necessary to carry out this Act.

(b) The purposes of this Act are—

(1) to protect the public against unreasonable risks of injury associated with consumer products;

(2) to assist consumers in evaluating the comparative safety of consumer products;

(3) to develop uniform safety standards for consumer products and to minimize conflicting State and local regulations; and

(4) to promote research and investigation into the causes and prevention of product-related deaths, illnesses, and injuries.

DEFINITIONS

Sec. 3. (a) For purposes of this Act:

(1) The term "consumer product" means any article, or component part thereof, produced or distributed (i) for sale to a consumer for use in or around a permanent or temporary household or residence, a school, in recreation, or (ii) for the personal use, consumption or enjoyment of a consumer in or around a permanent or temporary household or residence, a school, in recreation, or otherwise; but such term does not include—

(A) any article which is not customarily produced or distributed for sale to, or use or consumption by, or enjoyment of, a consumer,

(B) tobacco and tobacco products,

(C) motor vehicles or motor vehicle equipment (as defined by sections 102 (3) and (4) of the National Traffic and Motor Vehicle Safety Act of 1966),

(D) economic poisons (as defined by the Federal Insecticide, Fungicide, and Rodenticide Act),

(E) any article which, if sold by the manufacturer, producer, or importer, would be subject to the tax imposed by section 4181 of the Internal Revenue Code of 1954 (determined without regard to any exemptions from such tax provided by section 4182 or 4221, or any other provision of such Code), or any component of any such article,

(F) aircraft, aircraft engines, propellers, or appliances (as defined in section 101 of the Federal Aviation Act of 1958),

(G) boats which could be subjected to safety regulation under the Federal Boat Safety Act of 1971 (46 U.S.C. 1451 et seq.); vessels, and appurtenances to vessels (other than such boats), which could be subjected to safety regulation under title 52 of the Revised Statutes or other marine safety statutes administered by the department in which the Coast Guard is operating; and equipment (including associated equipment, as defined in section 3(8) of the Federal Boat Safety Act of 1971) to the extent that a risk of injury associated with the use of such equipment on boats or vessels could be eliminated or reduced by actions taken under any statute referred to in this subparagraph,

(H) drugs, devices, or cosmetics (as such terms are defined in sections 201 (g), (h), and (i) of the Federal Food, Drug, and Cosmetic Act), or

(I) food. The term "food", as used in this subparagraph means all "food", as defined in section 201(f) of the Federal Food, Drug, and Cosmetic Act, including poultry and poultry products (as defined in sections 4(e) and (f) of the Poultry Products Inspection Act), meat, meat food products (as defined in section 1(j) of the Federal Meat Inspection Act), and eggs and egg products (as defined in section 4 of the Egg Products Inspection Act).

See sections 30(d) and 31 of this Act, for limitations on Commission's authority to regulate certain consumer products.

(2) The term "consumer product safety rule" means a consumer products safety standard described in section 7(a), or a rule under this Act declaring a consumer product a banned hazardous product.

(3) The term "risk of injury" means a risk of death, personal injury, or serious or frequent illness.

(4) The term "manufacturer" means any person who manufactures or imports a consumer product.

(5) The term "distributor" means a person to whom a consumer product is delivered or sold for purposes of distribution in commerce, except that such term does not include a manufacturer or retailer of such product.

(6) The term "retailer" means a person to whom a consumer product is delivered or sold for purposes of sale or distribution by such person to a consumer.

(7)(A) The term "private labeler" means an owner of a brand or trademark on the label of a consumer product which bears a private label.

(B) A consumer product bears a private label if (i) the product (or its container) is labeled with the brand or trademark of a person other than a manufacturer of the product, (ii) the person with whose brand or trademark the product (or container) is labeled has authorized or caused the product to be so labeled, and (iii) the brand or trademark of a manufacturer of such product does not appear on such label.

(8) The term "manufactured" means to manufacture, produce, or assemble.

(9) The term "Commission" means the Consumer Product Safety Commission, established by section 4.

(10) The term "State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, Wake Island, Midway Island, Kingman Reef, Johnston Island, the Canal Zone, American Samoa, or the Trust Territory of the Pacific Islands.

(11) The terms "to distribute in commerce" and "distribution in commerce" mean to sell

in commerce, to introduce or deliver for introduction into commerce, or to hold for sale or distribution after introduction into commerce.

(12) The term "commerce" means trade, traffic, commerce, or transportation—

(A) between a place in a State and any place outside thereof, or

(B) which affects trade, traffic, commerce, or transportation described in subparagraph (A).

(13) The terms "import" and "importation" include reimporting a consumer product manufactured or processed, in whole or in part, in the United States.

(14) The term "United States", when used in the geographic sense, means all of the States as defined in paragraph (10)).

(b) A common carrier, contract carrier, or freight forwarder shall not, for purposes of this Act, be deemed to be a manufacturer, distributor, or retailer of a consumer product solely by reason of receiving or transporting a consumer product in the ordinary course of its business as such a carrier or forwarder.

CONSUMER PRODUCT SAFETY COMMISSION

Sec. 4. (a) An independent regulatory commission is hereby established, to be known as the Consumer Product Safety Commission, consisting of five Commissioners who shall be appointed by the President, by and with the advice and consent of the Senate, one of whom shall be designated by the President as Chairman. The Chairman, when so designated, shall act as Chairman until the expiration of his term of office as Commissioner. Any member of the Commission may be removed by the President for neglect of duty or malfeasance in office but for no other cause.

(b)(1) Except as provided in paragraph (2), (A) the Commissioners first appointed under this section shall be appointed for terms ending three, four, five, six, and seven years, respectively, after the date of the enactment of this Act, the term of each to be designated by the President at the time of nomination; and (B) each of their successors shall be appointed for a term of seven years from the date of the expiration of the term for which his predecessor was appointed.

(2) Any Commissioner appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed only for the remainder of such term. A Commissioner may continue to serve after the expiration of his term until his successor has taken office, except that he may not so continue to serve more than one year after the date on which his term would otherwise expire under this subsection.

(c) Not more than three of the Commissioners shall be affiliated with the same political party. No individual (1) in the employ of, or holding any official relation to, any person engaged in selling or manufacturing consumer products, or (2) owning stock or bonds of substantial value in a person so engaged, or (3) who is in any other manner pecuniarily interested in such a person, or in a substantial supplier of such a person, shall hold the office of Commissioner. A Commissioner may not engage in any other business, vocation, or employment.

(d) No vacancy in the Commission shall impair the right of the remaining Commissioners to exercise all the powers of the Commission, but three members of the Commission shall constitute a quorum for the transaction of business. The Commission shall have an official seal of which judicial notice shall be taken. The Commission shall annually elect a Vice Chairman to act in the absence or disability of the Chairman or in case of a vacancy in the office of the Chairman.

(e) The Commission shall maintain a principal office and such field offices as it deems necessary and may meet and exercise any of its powers at any other place.

(f)(1) The Chairman of the Commission shall be the principal executive officer of the Commission, and he shall exercise all of the executive and administrative functions of the Commission, including functions of the Commission with respect to (A) the appointment and supervision of personnel employed under the Commission (other than personnel employed regularly and full time in the immediate offices of commissioners other than the Chairman), (B) the distribution of business among personnel appointed and supervised by the Chairman and among administrative units of the Commission, and (C) the use and expenditure of funds.

(2) In carrying out any of his functions under the provisions of this subsection the Chairman shall be governed by general policies of the Commission and by such regulatory decisions, findings, and determinations as the Commission may by law be authorized to make.

(g)(1) The Chairman, subject to the approval of the Commission, shall appoint an Executive Director, a General Counsel, a Director of Engineering Sciences, a Director of Epidemiology, and a Director of Information. No individual so appointed may receive pay in excess of the annual rate of basic pay in effect for grade GS–18 of the General Schedule.

(2) The Chairman, subject to subsection (f)(2), may employ such other officers and employees (including attorneys) as are necessary in the execution of the Commission's functions. No full-time officer or employee of the Commission who was at any time during the 12 months preceding the termination of his employment with the Commission compensated at a rate in excess of the annual rate of basic pay in effect for grade GS-14 of the General Schedule, shall accept employment or compensation from any manufacturer subject to this Act, for a period of 12 months after terminating employment with the Commission.

(h)(1) Section 5314 of title 5, United States Code, is amended by adding at the end thereof the following new paragraph:

"(59) Chairman, Consumer Product Safety Commission."

(2) Section 5315 of such title is amended by adding at the end thereof the following new paragraph:

"(97) Members, Consumer Product Safety Commission (4)."

PRODUCT SAFETY INFORMATION AND RESEARCH

Sec. 5. (a) The Commission shall—

(1) maintain an Injury Information Clearinghouse to collect, investigate, analyze, and disseminate injury data, and information, relating to the causes and prevention of death, injury, and illness associated with consumer products; and

(2) conduct such continuing studies and investigations of deaths, injuries, diseases, other health impairments, and economic losses resulting from accidents involving consumer products as it deems necessary.

(b) The Commission may—

(1) conduct research, studies, and investigations on the safety of consumer products and on improving the safety of such products;

(2) test consumer products and develop product safety test methods and testing devices; and

(3) offer training in product safety investigation and test methods, and assist public and private organizations, administratively and technically, in the development of safety standards and test methods.

(c) In carrying out its functions under this section, the Commission may make grants or enter into contracts for the conduct of such functions with any person (including a governmental entity).

(d) Whenever the Federal contribution for any information, research, or development activity authorized by this Act is more than minimal, the Commission shall include in any contract, grant, or other arrangement for such activity, provisions effective to insure that the rights to all information, uses, processes, patents, and other developments resulting from that activity will be made available to the public without charge on a nonexclusive basis. Nothing in this subsection shall be construed to deprive any person of any right which he may have had, prior to entering into any arrangement referred to in this subsection, to any patent, patent application, or invention.

PUBLIC DISCLOSURE OF INFORMATION

Sec. 6. (a)(1) Nothing contained in this Act shall be deemed to require the release of any information described by subsection (b) of section 552, title 5, United States Code, or which is otherwise protected by law from disclosure to the public.

(2) All information reported to or otherwise obtained by the Commission or its representative under this Act which information contains or relates to a trade secret or other matter referred to in section 1905 of title 18, United States Code, shall be considered confidential and shall not be disclosed, except that such information may be disclosed to other officers or employees concerned with carrying out this Act or when relevant in any proceeding under this Act. Nothing in this Act shall authorize the witholding of information by the Commission or any officer or employee under its control from the duly authorized committees of the Congress.

(b)(1) Except as provided by paragraph (2) of this subsection, not less than 30 days prior to its public disclosure of any information obtained under this Act, or to be disclosed to the public in connection therewith (unless the Commission finds out that the public health and safety requires a lesser period of notice), the Commission shall, to the extent practicable, notify, and provide a summary of the information to, each manufacturer or private labeler of any consumer product to which such information pertains, if the manner in which such consumer product is to be designated or described in such information will permit the public to ascertain readily the identity of such manufacturer or private labeler, and shall provide such manufacturer or private labeler with a reasonable opportunity to submit comments to the Commission in regard to such information. The Commission shall take reasonable steps to assure, prior to its public disclosure thereof, that information from which the identity of such manufacturer or private labeler may be readily ascertained is accurate, and that such disclosure is fair in the circumstances and reasonably related to effectuating the purposes of this Act. If the Commission finds that, in the administration of this Act, it has made public disclosure of inaccurate or misleading information which reflects adversely upon the safety of any consumer product, or the practices of any manufacturer, private labeler, distributor, or retailer of consumer products, it shall, in a manner similar to that in which such disclosure was made, publish a retraction of such inaccurate or misleading information.

(2) Paragraph (1) (except for the last sentence thereof) shall not apply to the public disclosure of (A) information about any consumer product with respect to which product the Commission has filed an action under section 12 (relating to imminently hazardous products), or which the Commission has reasonable cause to believe is in violation of section 19 (relating to prohibited acts), or (B) information in the course of or concerning any administrative or judicial proceeding under this Act.

(c) The Commission shall communicate to each manufacturer of a consumer product, insofar as may be practicable, information as to any significant risk of injury associated with such product.

CONSUMER PRODUCT SAFETY STANDARDS

Sec. 7. (a) The Commission may by rule, in accordance with this section and section 9, promulgate consumer product safety standards. A consumer product safety standard shall consist of one or more of any of the following types of requirements:

(1) Requirements as to performance, composition, contents, design, construction, finish, or packaging of a consumer product.

(2) Requirements that a consumer product be marked with or accompanied by clear and adequate warnings or instructions, or requirements respecting the form of warnings or instructions.

Any requirement of such a standard shall be reasonably necessary to prevent or reduce an unreasonable risk of injury associated with such product. The requirements of such a standard (other than requirements relating to labeling, warnings, or instructions) shall, whenever feasible, be expressed in terms of performance requirements.

(b) A proceeding for the development of a consumer product safety standard under this Act shall be commenced by the publication in the Federal Register of a notice which shall—

(1) identify the product and the nature of the risk of injury associated with the product;

(2) state the Commission's determination that a consumer product safety standard is necessary to eliminate or reduce the risk of injury;

(3) include information with respect to any existing standard known to the Commission which may be relevant to the proceeding; and

(4) include an invitation for any person, including any State or Federal agency (other than the Commission), within 30 days after the date of publication of the notice (A) to submit to the Commission an existing standard as the proposed consumer product safety standard or (B) to offer to develop the proposed consumer product safety standard.

An invitation under paragraph (4)(B) shall specify a period time, during which the standard is to be developed, which shall be a period ending 150 days after the publication of the notice, unless the Commission for good cause finds (and includes such finding in the notice) that a different period is appropriate.

(c) If the Commission determines that (1) there exists a standard which has been issued or adopted by any Federal agency or by any other qualified agency, organization, or institution, and (2) such standard if promulgated under this Act, would eliminate or reduce the unreasonable risk of injury associated with the product, then it may, in lieu of accepting an offer pursuant to subsection (d) of this section, publish such standard as a proposed consumer product safety rule.

(d)(1) Except as provided by subsection (c), the Commission shall accept one, and may accept more than one, offer to develop a proposed consumer product safety standard pursuant to the invitation prescribed by subsection (b)(4)(B), if it determines that the offeror is technically competent, is likely to develop an appropriate standard within the period specified in the invitation under subsection (b), and will comply with regulations of the Commission under paragraph (3) of this subsection. The Commission shall publish in the Federal Register the name and address of each person whose offer it accepts, and a summary of the terms of such offer as accepted.

(2) If an offer is accepted under this subsection, the Commission may agree to contribute to the offeror's cost in developing a proposed consumer product safety standard, in any case in which the Commission determines that such contribution is likely to result in a more satisfactory standard than would be developed without such contribution, and that the offeror is financially responsible. Regulations of the Commission shall set forth the items of cost in which it may participate, and

shall exclude any contribution to the acquisition of land or buildings.

(3) The Commission shall prescribe regulations governing the development of proposed consumer product safety standards by persons whose offers are accepted under paragraph (1). Such regulations shall include requirements—

(A) that standards recommended for promulgation be suitable for promulgation under this Act, be supported by test data or such other documents or materials as the Commission may reasonably require to be developed, and (where appropriate) contain suitable test methods for measurement of compliance with such standards;

(B) for notice and opportunity by interested persons (including representatives of consumers and consumer organizations) to participate in the development of such standards;

(C) for the maintenance of records, which shall be available to the public, to disclose the course of the development of standards recommended for promulgation, the comments and other information submitted by any person in connection with such development (including dissenting views and comments and information with respect to the need for such recommended standards), and such other matters as may be relevant to the evaluation of such recommended standards; and

(D) that the Commission and the Comptroller General of the United States, or any of their duly authorized representatives, have access for the purpose of audit and examination to any books, documents, papers, and records relevant to the development of such recommended standards or to the expenditure of any contribution of the Commission for the development of such standards.

(e)(1) If the Commission has published a notice of proceeding as provided by subsection (b) of this section and has not, within 30 days after the date of publication of such notice, accepted an offer to develop a proposed consumer product safety standard, the Commission may develop a proposed consumer product safety rule and publish such proposed rule.

(2) If the Commission accepts an offer to develop a proposed consumer product safety standard, the Commission may not, during the development period (specified in paragraph (3)) for such standard—

(A) publish a proposed rule applicable to the same risk of injury associated with such product, or

(B) develop proposals for such standard or contract with third parties for such development, unless the Commission determines that no offeror whose offer was accepted is making satisfactory progress in the development of such standard.

In any case in which the sole offeror whose offer is accepted under subsection (d)(1) of this section is the manufacturer, distributor, or retailer of a consumer product proposed to be regulated by the consumer product safety standard, the Commission may independently proceed to develop proposals for such standard during the development period.

(3) For purposes of paragraph (2), the development period for any standard is a period (A) beginning on the date on which the Commission first accepts an offer under subsection (d)(1) for the development of a proposed standard, and (B) ending on the earlier of—

(i) the end of the period specified in the notice of proceeding (except that the period specified in the notice may be extended if good cause is shown and the reasons for such extension are published in the Federal Register), or

(ii) the date on which it determines (in accordance with such procedures as it may by rule prescribe) that no offeror whose offer was accepted is able and willing to continue satisfactorily the development of the proposed standard which was the subject of the offer, or

(iii) the date on which an offeror whose offer was accepted submits such a recommended standard to the Commission.

(f) Not more than 210 days after its publication of a notice of proceeding pursuant to subsection (b) (which time may be extended by the Commission by a notice published in the Federal Register stating good cause therefor), the Commission shall publish in the Federal Register a notice withdrawing such notice of proceeding or publish a proposed rule which either proposes a product safety standard applicable to any consumer product subject to such notice, or proposes to declare any such subject product a banned hazardous consumer product.

BANNED HAZARDOUS PRODUCTS

Sec. 8. Whenever the Commission finds that—

(1) a consumer product is being, or will be, distributed in commerce and such consumer product presents an unreasonable risk of injury; and

(2) no feasible consumer product safety standard under this Act would adequately protect the public from the unreasonable risk of injury associated with such product,

the Commission may propose and, in accordance with section 9, promulgate a rule declaring such product a banned hazardous product.

ADMINISTRATIVE PROCEDURE APPLICABLE TO PROMULGATION OF CONSUMER PRODUCT SAFETY RULES

Sec. 9. (a)(1) Within 60 days after the publication under section 7 (c), (e)(1), or (f) or section 8 of a proposed consumer product safety rule respecting a risk of injury associated with a consumer product, the Commission shall—

(A) promulgate a consumer product safety rule respecting the risk of injury associated with such product if it makes the findings required under subsection (c), or

(B) withdraw by rule the applicable notice of proceeding if it determines that such rule is not (i) reasonably necessary to eliminate or reduce an unreasonable risk of injury associated with the product, or (ii) in the public interest;

except that the Commission may extend such 60-day period for good cause shown (if it publishes its reasons therefor in the Federal Register).

(2) Consumer product safety rules which have been proposed under section 7 (c), (e)(1), or (f) or section 8 shall be promulgated pursuant to section 553 of title 5, United States Code, except that the Commission shall give interested persons an opportunity for the oral presentation of data, views, or arguments, in addition to an opportunity to make written submissions. A transcript shall be kept of any oral presentation.

(b) A consumer product safety rule shall express in the rule itself the risk of injury which the standard is designed to eliminate or reduce. In promulgating such a rule the Commission shall consider relevant available product data including the results of research, development, testing, and investigation activities conducted generally and pursuant to this Act.

(c)(1) Prior to promulgating a consumer product safety rule, the Commission shall consider, and shall make appropriate findings for inclusion in such rule with respect to—

(A) the degree and nature of the risk of injury the rule is designed to eliminate or reduce;

(B) the approximate number of consumer products, or types or classes thereof, subject to such rule;

(C) the need of the public for the consumer products subject to such rule, and the probable effect of such rule upon the utility, cost, or availability of such products to meet such need; and

(D) any means of achieving the objective of the order while minimizing adverse effects on competition or disruption or dislocation of manufacturing and other commercial practices consistent with the public health and safety.

(2) The Commission shall not promulgate a consumer product safety rule unless it finds (and includes such finding in the rule)—

(A) that the rule (including its effective date) is reasonably necessary to eliminate or reduce an unreasonable risk of injury associated with such product;

(B) that the promulgation of the rule is in the public interest; and

(C) in the case of a rule declaring the product a banned hazardous product, that no feasible consumer product safety standard under this Act would adequately protect the public from the unreasonable risk of injury associated with such product.

(d)(1) Each consumer product safety rule shall specify the date such rule is to take effect not exceeding 180 days from the date promulgated, unless the Commission finds, for good cause shown, that a later effective date is in the public interest and publishes its reasons for such finding. The effective date of a consumer product safety standard under this Act shall be set at a date at least 30 days after the date of promulgation unless the Commission for good cause shown determines that an earlier effective date is in the public interest. In no case may the effective date be set at a date which is earlier than the date of promulgation. A consumer product safety standard shall be applicable only to consumer products manufactured after the effective date.

(2) The Commission may by rule prohibit a manufacturer of a consumer product from stockpiling any product to which a consumer product safety rule applies, so as to prevent such manufacturer from circumventing the purpose of such consumer product safety rule. For purposes of this paragraph, the term "stockpiling" means manufacturing or importing a product between the date of promulgation of such consumer product safety rule and its effective date at a rate which is significantly greater (as determined under the rule under this paragraph) than the rate at which such product was produced or imported during a base period (prescribed in the rule under this paragraph) ending before the date of promulgation of the consumer product safety rule.

(e) The Commission may by rule amend or revoke any consumer product safety rule. Such amendment or revocation shall specify the date on which it is to take effect which shall not exceed 180 days from the date the amendment or revocation is published unless the Commission finds for good cause shown that a later effective date is in the public interest and publishes its reasons for such finding. Where an amendment involves a material change in a consumer product safety rule, sections 7 and 8, and subsections (a) through (d) of this section shall apply. In order to revoke a consumer product safety rule, the Commission shall publish a proposal to revoke such rule in the Federal Register, and allow oral and written presentations in accordance with subsection (a)(2) of this section. It may revoke such rule only if it determines that the rule is not reasonably necessary to eliminate or reduce an unreasonable risk of injury associated with the product. Section 11 shall apply to any amendment of a consumer product safety rule which involves a material change and to any revocation of a consumer product safety rule, in the same manner and to the same extent as such section applies to the Commission's action in promulgating such a rule.

COMMISSION RESPONSIBILITY— PETITION FOR CONSUMER PRODUCT SAFETY RULE

Sec. 10. (a) Any interested person, including a consumer or consumer organization, may petition the Commission to commence a proceeding for the issuance, amendment, or revocation of a consumer product safety rule.

(b) Such petition shall be filed in the principal office of the Commission and shall set forth (1) facts which it is claimed establish that a consumer product safety rule or an amendment or revocation thereof is necessary, and (2) a brief description of the substance of the consumer product safety rule or amendment thereof which it is claimed should be issued by the Commission.

(c) The Commission may hold a public hearing or may conduct such investigation or proceeding as it deems appropriate in order to determine whether or not such petition should be granted.

(d) Within 120 days after filing of a petition described in subsection (b), the Commission shall either grant or deny the petition. If the Commission grants such petition, it shall promptly commence an appropriate proceeding under section 7 or 8. If the Commission denies such petition it shall publish in the Federal Register its reasons for such denial.

(e)(1) If the Commission denies a petition made under this section (or if it fails to grant or deny such petition within the 120-day period) the petitioner may commence a civil action in a United States district court to compel the Commission to initiate a proceeding to take the action requested. Any such action shall be filed within 60 days after the Commission's denial of the petition, or (if the Commission fails to grant or deny the petition within 120 days after filing the petition) within 60 days after the expiration of the 120-day period.

(2) If the petitioner can demonstrate to the satisfaction of the court, by a preponderance of evidence in a de novo proceeding before such court, that the consumer product presents an unreasonable risk of injury, and that the failure of the Commission to initiate a rule-making proceeding under section 7 or 8 unreasonably exposes the petitioner or other consumers to a risk of injury presented by the consumer product, the court shall order the Commission to initiate the action requested by the petitioner.

(3) In any action under this subsection, the district court shall have no authority to compel the Commission to take any action other than the initiation of a rule-making proceeding in accordance with section 7 or 8.

(f) The remedies under this section shall be in addition to, and not in lieu of, other remedies provided by law.

(g) Subsection (e) of this section shall apply only with respect to petitions filed more than 3 years after the date of enactment of this Act.

JUDICIAL REVIEW OF CONSUMER PRODUCT SAFETY RULES

Sec. 11. (a) Not later than 60 days after a consumer product safety rule is promulgated by the Commission, any person adversely affected by such rule, or any consumer or consumer organization, may file a petition with the United States court of appeals for the District of Columbia or for the circuit in which such person, consumer, or organization resides or has his principal place of business for judicial review of such rule. Copies of the petition shall be forthwith transmitted by the clerk of the court to the Commission or other officer designated by it for that purpose and to the Attorney General. The Commission shall transmit to the Attorney General, who shall file in the court, the record of the proceedings on which the Commission based its rule, as provided in section 2112 of title 28 of the United States Code. For purposes of this section, the term "record" means such consumer product safety rule; any notice or proposal published pursuant to section 7, 8, or 9; the transcript required by section 9(a)(2) of any oral presentation; any written submission of interested parties; and any other information which the Commission considers relevant to such rule.

(b) If the petitioner applies to the court for leave to adduce additional data, views, or arguments and shows to the satisfaction of the court that such additional data, views, or arguments are material and that there were reasonable grounds for the petitioner's failure to adduce such data, views, or arguments in the proceeding before the Commission, the court may order the Commission to provide additional opportunity for the oral presentation of data, views, or arguments and for written submissions. The Commission may modify its findings, or make new findings by reason of the additional data, views, or arguments so taken and shall file such modified or new findings, and its recommendation, if any, for the modification or setting aside of its original rule, with the return of such additional data, views, or arguments.

(c) Upon the filing of the petition under subsection (a) of this section the court shall have jurisdiction to review the consumer product safety rule in accordance with chapter 7 of title 5, United States Code, and to grant appropriate relief, including interim relief, as provided in such chapter. The consumer product safety rule shall not be affirmed unless the Commission's findings under section 9(c) are supported by substantial evidence on the record taken as a whole.

(d) The judgment of the court affirming or setting aside, in whole or in part, any consumer product safety rule shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification, as provided in section 1254 of title 28 of the United States Code.

(e) The remedies provided for in this section shall be in addition to and not in lieu of any other remedies provided by law.

IMMINENT HAZARDS

Sec. 12. (a) The Commission may file in a United States district court an action (1) against an imminently hazardous consumer product for seizure of such product under subsection (b)(2), or (2) against any person who is a manufacturer, distributor, or retailer of such product, or (3) against both. Such an action may be filed notwithstanding the existence of a consumer product safety rule applicable to such product, or the pendency of any administrative or judicial proceedings under any other provision of this Act. As used in this section, and hereinafter in this Act, the term "imminently hazardous consumer product" means a consumer product which presents imminent and unreasonable risk of death, serious illness, or severe personal injury.

(b)(1) The district court in which such action is filed shall have jurisdiction to declare such product an imminently hazardous consumer product, and (in the case of an action under subsection (a)(2)) to grant (as ancillary to such declaration or in lieu thereof) such temporary or permanent relief as may be necessary to protect the public from such risk. Such relief may include a mandatory order requiring the notification of such risk to purchasers of such product known to the defendant, public notice, the recall, the repair or the replacement of, or refund for, such product.

(2) In the case of an action under subsection (a)(1), the consumer product may be proceeded against by process of libel for the seizure and condemnation of such product in any United States district court within the jurisdiction of which such consumer product is found. Proceedings and cases instituted under the authority of the preceding sentence shall conform as nearly as possible to proceedings in rem in admiralty.

(c) Where appropriate, concurrently with the filing of such action or as soon thereafter as may be practicable, the Commission shall initiate a proceeding to promulgate a consumer product safety rule applicable to the consumer product with respect to which such action is filed.

(d)(1) Prior to commencing an action under subsection (a), the Commission may consult the Product Safety Advisory Council (established under section 28) with respect to its determination to commence such action, and request the Council's recommendations as to the type of temporary or permanent relief which may be necessary to protect the public.

(2) The Council shall submit its recommendations to the Commission within one week of such request.

(3) Subject to paragraph (2), the Council may conduct such hearing or offer such opportunity for the presentation of views as it may consider necessary or appropriate.

(e)(1) An action under subsection (a)(2) of this section may be brought in the United States district court for the District of Columbia or in any judicial district in which any of the defendants is found, is an inhabitant or transacts business; and process in such an action may be served on a defendant in any other district in which such defendant resides or may be found. Subpenas requiring attendance of witnesses in such an action may run into any other district. In determining the judicial district in which an action may be brought under this section in instances in which such action may be brought in more than one judicial district, the Commission shall take into account the convenience of the parties.

(2) Whenever proceedings under this section involving substantially similar consumer products are pending in courts in two or more judicial districts, they shall be consolidated for trial by order of any such court upon application reasonably made by any party in interest, upon notice to all other parties in interest.

(f) Notwithstanding any other provision of law, in any action under this section, the Commission may direct attorneys employed by it to appear and represent it.

NEW PRODUCTS

Sec. 13. (a) The Commission may, by rule, prescribe procedures for the purpose of insuring that the manufacturer of any new consumer product furnish notice and a description of such product to the Commission before its distribution in commerce.

(b) For purposes of this section, the term "new consumer product" means a consumer product which incorporates a design, material, or form of energy exchange which (1) has not previously been used substantially in consumer products and (2) as to which there exists a lack of information adequate to determine the safety of such product in use by consumers.

PRODUCT CERTIFICATION AND LABELING

Sec. 14. (a)(1) Every manufacturer of a product which is subject to a consumer product safety standard under this Act and which is distributed in commerce (and the private labeler of such product if it bears a private label) shall issue a certificate which shall certify that such product conforms to all applicable consumer product safety standards, and shall specify any standard which is applicable. Such certificate shall accompany the product or shall otherwise be furnished to any distributor or retailer to whom the product is delivered. Any certificate under this subsection shall be based on a test of each product or upon a reasonable testing program; shall state the name of the manufacturer or private labeler issuing the certificate; and shall include the date and place of manufacture.

(2) In the case of a consumer product for which there is more than one manufacturer or more than one private labeler, the Commission may by rule designate one or more of such manufacturers or one or more of such private labelers (as the case may be) as the persons who shall issue the certificate required by paragraph (1) of this subsection, and may exempt all other manufacturers of such product or all other private labelers of the product (as the case may be) from the requirement under paragraph (1) to issue a certificate with respect to such product.

(b) The Commission may by rule prescribe reasonable testing programs for consumer products which are subject to consumer product safety standards under this Act and for which a certificate is required under subsection (a). Any test or testing program on the basis of which a certificate is issued under subsection (a) may, at the option of the person required to certify the product, be conducted by an independent third party qualified to perform such tests or testing programs.

(c) The Commission may by rule require the use and prescribe the form and content of labels which contain the following information (or that portion of it specified in the rule)—

(1) The date and place of manufacture of any consumer product.

(2) A suitable identification of the manufacturer of the consumer product, unless the product bears a private label in which case it shall identify the private labeler and shall also contain a code mark which will permit the seller of such product to identify the manufacturer thereof to the purchaser upon his request.

(3) In the case of a consumer product subject to a consumer product safety rule, a certification that the product meets all applicable consumer product safety standards and a specification of the standards which are applicable.

Such labels, which practicable, may be required by the Commission to be permanently marked on or affixed to any such consumer product. The Commission may, in appropriate cases, permit information required under paragraphs (1) and (2) of this subsection to be coded.

NOTIFICATION AND REPAIR, REPLACEMENT, OR REFUND

Sec. 15. (a) For purposes of this section, the term "substantial product hazard" means—

(1) a failure to comply with an applicable consumer product safety rule which creates a substantial risk of injury to the public, or

(2) a product defect which (because of the pattern of defect, the number of defective products distributed in commerce, the severity of the risk, or otherwise) creates a substantial risk of injury to the public.

(b) Every manufacturer of a consumer product distributed in commerce, and every distributor and retailer of such product, who obtains information which reasonably supports the conclusion that such product—

(1) fails to comply with an applicable consumer product safety rule; or

(2) contains a defect which could create a substantial product hazard described in subsection (a)(2),

shall immediately inform the Commission of such failure to comply or of such defect, unless such manufacturer, distributor, or retailer has actual knowledge that the Commission has been adequately informed of such defect or failure to comply.

(c) If the Commission determines (after affording interested persons, including consumers and consumer organizations, an opportunity for a hearing in accordance with subsection (f) of this section) that a product distributed in commerce presents a substantial product hazard and that notification is required in order to adequately protect the public from such substantial product hazard, the Commission may order the manufacturer or any distributor or retailer of the product to take any one or more of the following actions:

(1) To give public notice of the defect or failure to comply.

(2) To mail notice to each person who is a manufacturer, distributor, or retailer of such product.

(3) To mail notice to every person to whom the person required to give notice knows such product was delivered or sold.

Any such order shall specify the form and content of any notice required to be given under such order.

(d) If the Commission determines (after affording interested parties, including consumers and consumer organizations, an opportunity for a hearing in accordance with subsection (f)) that a product distributed in commerce presents a substantial product hazard and that action under this subsection is in the public interest, it may order the manufacturer or any distributor or retailer of such product to take whichever of the following actions the person to whom the order is directed elects:

(1) To bring such product into conformity with the requirements of the applicable consumer product safety rule or to repair the defect in such product.

(2) To replace such product with a like or equivalent product which complies with the applicable consumer product safety rule or which does not contain the defect.

(3) To refund the purchase price of such product (less a reasonable allowance for use, if such product has been in the possession of a consumer for one year or more (A) at the time of public notice under subsection (c), or (B) at the time the consumer receives actual notice of the defect or noncompliance, whichever first occurs).

An order under this subsection may also require the person to whom it applies to submit a plan, satisfactory to the Commission, for taking action under whichever of the preceding paragraphs of this subsection under which such person has elected to act. The Commission shall specify in the order the persons to whom refunds must be made if the person to whom the order is directed elects to take the action described in paragraph (3). If an order under this subsection is directed to more than one person, the Commission shall specify which person has the election under this subsection.

(e)(1) No charge shall be made to any person (other than a manufacturer, distributor, or retailer) who avails himself of any remedy provided under an order issued under subsection (d), and the person subject to the order shall reimburse each person (other than a manufacturer, distributor, or retailer) who is entitled to such a remedy for any reasonable and foreseeable expenses incurred by such person in availing himself of such remedy.

(2) An order issued under subsection (c) or (d) with respect to a product may require any person who is a manufacturer, distributor, or retailer of the product to reimburse any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order, if the Commission determines such reimbursement to be in the public interest.

(f) An order under subsection (c) or (d) may be issued only after an opportunity for a hearing in accordance with section 554 of title 5, United States Code, except that, if the Commission determines that any person who wishes to participate in such hearing is a part of a class of participants who share an identity of interest, the Commission may limit such person's participation in such hearing to participation through a single representative designated by such class (or by the Commission if such class fails to designate such a representative).

INSPECTION AND RECORDKEEPING

Sec. 16. (a) For purposes of implementing this Act, or rules or orders prescribed under this Act, officers or employees duly designated by the Commission, upon presenting appropriate credentials and a written notice from the Commission to the owner, operator, or agent in charge, are authorized—

(1) to enter, at reasonable times, (A) any factory, warehouse, or establishment in which consumer products are manufactured or held, in connection with distribution in commerce, or (B) any conveyance being used to transport consumer products in connection with distribution in commerce; and

(2) to inspect, at reasonable times and in a reasonable manner such conveyance or those areas of such factory, warehouse, or establishment where such products are manufactured, held, or transported and which may relate to the safety of such products. Each such inspection shall be commenced and completed with reasonable promptness.

(b) Every person who is a manufacturer, private labeler, or distributor of a consumer product shall establish and maintain such records, make such reports, and provide such information as the Commission may, by rule, reasonably require for the purposes of implementing this Act, or to determine compliance with rules or orders prescribed under this Act. Upon request of an officer or employee duly designated by the Commission, every such manufacturer, private labeler, or distributor shall permit the inspection of appropriate books, records, and papers relevant to determining whether such manufacturer, private labeler, or distributor has acted or is acting in compliance with this Act and rules under this Act.

IMPORTED PRODUCTS

Sec. 17. (a) Any consumer product offered for importation into the customs territory of the United States (as defined in general headnote 2 to the Tariff Schedules of the United States) shall be refused admission into such customs territory if such product—

(1) fails to comply with an applicable consumer product safety rule;

(2) is not accompanied by a certificate required by section 14, or is not labeled in accordance with regulations under section 14 (c);

(3) is or has been determined to be an imminently hazardous consumer product in a proceeding brought under section 12;

(4) has a product defect which constitutes a substantial product hazard (within the meaning of section 15(a)(2)); or

(5) is a product which was manufactured by a person who the Commission has informed the Secretary of the Treasury is in violation of subsection (g).

(b) The Secretary of the Treasury shall obtain without charge and deliver to the Commission, upon the latter's request, a reasonable number of samples of consumer products being offered for import. Except for those owners or consignees who are or have been afforded an opportunity for a hearing in a proceeding under section 12 with respect to an imminently hazardous product, the owner or consignee of the product shall be afforded an opportunity by the Commission for a hearing in accordance with section 554 of title 5 of the United States Code with respect to the importation of such products into the customs territory of the United States. If it appears from examination of such samples or otherwise that a product must be refused admission under the terms of subsection (a), such product shall be refused admission, unless subsection (c) of this section applies and is complied with.

(c) If it appears to the Commission that any consumer product which may be refused admission pursuant to subsection (a) of this section can be so modified that it need not (under the terms of paragraphs (1) through (4) of subsection (a)) be refused admission, the Commission may defer final determination as to the admission of such product and, in accordance with such regulations as the Commission and the Secretary of the Treasury shall jointly agree to, permit such product to be delivered from customs custody under bond for the purpose of permitting the owner or consignee an opportunity to so modify such product.

(d) All actions taken by an owner or consignee to modify such product under subsection (c) shall be subject to the supervision of an officer or employee of the Commission and of the Department of the Treasury. If it appears to the Commission that the product cannot be so modified or that the owner or consignee is not proceeding satisfactorily to modify such product, it shall be refused admission into the customs territory of the United States, and the Commission may direct the Secretary to demand redelivery of the product into customs custody, and to seize the product in accordance with section 22(b) if it is not so redelivered.

(e) Products refused admission into the customs territory of the United States under this section must be exported, except that upon application, the Secretary of the Treasury may permit the destruction of the product in lieu of exportation. If the owner or consignee does not export the product within a reasonable time, the Department of the Treasury may destroy the product.

(f) All expenses (including travel, per diem or subsistence, and salaries of officers or employees of the United States) in connection with the destruction provided for in this section (the amount of such expenses to be determined in accordance with regulations of the Secretary of the Treasury) and all expenses in connection with the storage, cartage, or labor with respect to any consumer product refused admission under this section, shall be paid by the owner or consignee and, in default of such payment, shall constitute a lien against any future importations made by such owner or consignee.

(g) The Commission may, by rule, condition the importation of a consumer product on the manufacturer's compliance with the inspection and recordkeeping requirements of this Act and the Commission's rules with respect to such requirements.

EXPORTS

Sec. 18. This Act shall not apply to any consumer product if (1) it can be shown that such product is manufactured, sold, or held for sale for export from the United States (or that such product was imported for export), unless such consumer product is in fact distributed in commerce for use in the United States, and (2) such consumer product when distributed in commerce, or any container in which it is enclosed when so distributed, bears a stamp or label stating that such consumer product is intended for export; except that this Act shall apply to any consumer product manufactured for sale, offered for sale, or sold for shipment to any installation of the United States located outside of the United States.

PROHIBITED ACTS

Sec. 19. (a) It shall be unlawful for any person to—

(1) manufacture for sale, offer for sale, distribute in commerce or import into the United States any consumer product which is not in conformity with an applicable consumer product safety standard under this Act;

(2) manufacture for sale, offer for sale, distribute in commerce, or import into the United States any consumer product which has been declared a banned hazardous product by a rule under this Act;

(3) fail or refuse to permit access to or copying of records, or fail or refuse to make reports or provide information, or fail or refuse to permit entry or inspection, as required under this Act or rule thereunder;

(4) fail to furnish information required by section 15(b);

(5) fail to comply with an order issued under section 15(c) or (d) (relating to notification, and to repair, replacement, and refund);

(6) fail to furnish a certificate required by section 14 or issue a false certificate if such person in the exercise of due care has reason to know that such certificate is false or misleading in any material respect; or to fail to comply with any rule under section 14(c) (relating to labeling); or

(7) fail to comply with any rule under section 9(d)(2) (relating to stockpiling).

(b) Paragraphs (1) and (2) of subsection (a) of this section shall not apply to any person (1) who holds a certificate issued in accordance, with section 14(a) to the effect that such consumer product conforms to all applicable consumer product safety rules, unless such person knows that such consumer product does not conform, or (2) who relies in good faith on the representation of the manufacturer or a distributor of such product that the product is not subject to an applicable product safety rule.

CIVIL PENALTIES

Sec. 20. (a)(1) Any person who knowingly violates section 19 of this Act shall be subject to a civil penalty not to exceed $2,000 for each such violation. Subject to paragraph (2), a violation of section 19(a) (1), (2), (4), (5), (6), or (7) shall constitute a separate offense with respect to each consumer product involved, except that the maximum civil penalty shall not exceed $500,000 for any related series of violations. A violation of section 19(a)(3) shall constitute a separate violation with respect to each failure or refusal to allow or perform an act required thereby; and, if such violation is a continuing one, each day of such violation shall constitute a separate offense, except that the maximum civil penalty shall not exceed $500,000 for any related series of violations.

(2) The second sentence of paragraph (1) of this subsection shall not apply to violations of paragraph (1) or (2) of section 19(a)—

(A) if the person who violated such paragraphs is not the manufacturer or private labeler or a distributor of the products involved, and

(B) if such person did not have either (i) actual knowledge that his distribution or sale of the product violated such paragraphs or (ii) notice from the Commission that such distribution or sale would be a violation of such paragraphs.

(b) Any civil penalty under this section may be compromised by the Commission. In determining the amount of such penalty or whether it should be remitted or mitigated and in what amount, the appropriateness of such penalty to the size of the business of the person charged and the gravity of the violation shall be considered. The amount of such penalty when finally determined, or the amount agreed on compromise, may be deducted from any sums owing by the United States to the person charged.

(c) As used in the first sentence of subsection (a)(1) of this section, the term "knowingly" means (1) the having of actual knowledge, or (2) the presumed having of knowledge deemed to be possessed by a reasonable man who acts in the circumstances, including knowledge obtainable upon the exercise of due care to ascertain the truth of representations.

CRIMINAL PENALTIES

Sec. 21. (a) Any person who knowingly and willfully violates section 19 of this Act after having received notice of noncompliance from the Commission shall be fined not more than $50,000 or be imprisoned not more than one year, or both.

(b) Any individual director, officer, or agent of a corporation who knowingly and willfully authorizes, orders, or performs any of the acts or practices constituting in whole or in part a violation of section 19, and who has knowledge of notice of noncompliance received by the corporation from the Commission, shall be subject to penalties under this section without regard to any penalties to which that corporation may be subject under subsection (a).

INJUNCTIVE ENFORCEMENT AND SEIZURE

Sec. 22. (a) The United States district courts shall have jurisdiction to restrain any violation of section 19, or to restrain any person from distributing in commerce a product which does not comply with a consumer product safety rule, or both. Such actions may be brought by the Commission (with the concurrence of the Attorney General) or by the Attorney General in any United States district court for a district wherein any act, omission, or transaction constituting the violation occurred, or in such court for the district wherein the defendant is found or transacts business. In any action under this section process may be served on a defendant in any other district in which the defendant resides or may be found.

(b) Any consumer product which fails to conform to an applicable consumer product safety rule when introduced into or while in commerce or while held for sale after shipment in commerce shall be liable to be proceeded against on libel of information and condemned in any United States district court within the jurisdiction of which such consumer product is found. Proceedings in cases instituted under the authority of this subsection shall conform as nearly as possible to proceedings in rem in admiralty. Whenever such proceedings involving substantially similar consumer products are pending in courts of two or more judicial districts they shall be consolidated for trial by order of any such court upon application reasonably made by any party in interest upon notice to all other parties in interest.

SUITS FOR DAMAGES BY PERSONS INJURED

Sec. 23. (a) Any person who shall sustain injury by reason of any knowing (including willful) violation of a consumer product safety rule, or any other rule or order issued by the Commission may sue any person who knowingly (including willfully) violated any such rule or order in any district court of the United States in the district in which the defendant resides or is found or has an agent, subject to the provisions of section 1331 of title 28, United States Code as to the amount in controversy, and shall recover damages sustained, and the cost of suit, including a reasonable attorney's fee, if considered appropriate in the discretion of the court.

(b) The remedies provided for in this section shall be in addition to and not in lieu of any other remedies provided by common law or under Federal or State law.

PRIVATE ENFORCEMENT OF PRODUCT SAFETY RULES AND OF SECTION 15 ORDERS

Sec. 24. Any interested person may bring an action in any United States district court for the district in which the defendant is found or transacts business to enforce a consumer product safety rule or an order under section 15, and to obtain appropriate injunctive relief. Not less than thirty days prior to the commencement of such action, such interested person shall give notice by registered mail to the Commission, to the Attorney General, and to the person against whom such action is directed. Such notice shall state the nature of the alleged violation of any such standard or order, the relief to be requested, and the court in which the action will be brought. No separate suit shall be brought under this section if at the time the suit is brought the same alleged violation is the subject of a pending civil or criminal action by the United States under this Act. In any action under this section, such interested person may elect, by a demand for such relief in his complaint, to recover reasonable attorney's fees, in which case the court shall award the costs of suit, including a reasonable attorney's fee, to the prevailing party.

EFFECT ON PRIVATE REMEDIES

Sec. 25. (a) Compliance with consumer product safety rules or other rules or orders under this Act shall not relieve any person from liability at common law or under State statutory law to any other person.

(b) The failure of the Commission to take any action or commence a proceeding with respect to the safety of a consumer product shall not be admissible in evidence in litigation at common law or under State statutory law relating to such consumer product.

(c) Subject to sections 6(a)(2) and 6(b) but notwithstanding section 6(a)(1), (1) any accident or investigation report made under this Act by an officer or employee of the Commission shall be made available to the public in a manner which will not identify any injured person or any person treating him, without the consent of the person so identified, and (2) all reports on research projects, demonstration projects, and other related activities shall be public information.

EFFECT ON STATE STANDARDS

Sec. 26. (a) Whenever a consumer product safety standard under this Act is in effect and applies to a risk of injury associated with a consumer product, no State or political subdivision of a State shall have any authority either to establish or to continue in effect any provision of a safety standard or regulation which prescribes any requirements as to the performance, composition, contents, design, finish, construction, packaging, or labeling of such product which are designed to deal with the same risk of injury associated with such consumer product, unless such requirements are identical to the requirements of the Federal standard.

(b) Nothing in this section shall be construed to prevent the Federal Government or the government of any State or political subdivision thereof from establishing a safety requirement applicable to a consumer product for its own use if such requirement imposes a higher standard of performance than that required to comply with the otherwise applicable Federal standard.

(c) Upon application of a State or political subdivision thereof, the Commission may by rule, after notice and opportunity for oral presentation of views, exempt from the provisions of subsection (a) (under such conditions as it may impose) a proposed safety standard or regulation described in such application, where the proposed standard or regulation (1) imposes a higher level of performance than the Federal standard, (2) is required by compelling local conditions, and (3) does not unduly burden interestate commerce.

ADDITIONAL FUNCTIONS OF COMMISSION

Sec. 27. (a) The Commission may, by one or more of its members or by such agents or agency as it may designate, conduct any hearing or other inquiry necessary or appropriate to its functions anywhere in the United States. A Commissioner who participates in such a hearing or other inquiry shall not be disqualified solely by reason of such participation from subsequently participating in a decision of the Commission in the same matter. The Commission shall publish notice of any proposed hearing in the Federal Register and shall afford a reasonable opportunity for interested persons to present relevant testimony and data.

(b) The Commission shall also have the power—

(1) to require, by special or general orders, any person to submit in writing such reports and answers to questions as the Commission may prescribe; and such submission shall be made within such reasonable period and under oath or otherwise as the Commission may determine;

(2) to administer oaths;

(3) to require by subpena the attendance and testimony of witnesses and the production of all documentary evidence relating to the execution of its duties;

(4) in any proceeding or investigation to order testimony to be taken by deposition before any person who is designated by the Commission and has the power to administer oaths and, in such instances, to compel testimony and the production of evidence in the same manner as authorized under paragraph (3) of this subsection;

(5) to pay witnesses the same fees and mileage as are paid in like circumstances in the courts of the United States;

(6) to accept gifts and voluntary and uncompensated services, notwithstanding the provisions of section 3679 of the Revised Statutes (31 U.S.C. 665(b));

(7) to initiate, prosecute, defend, or appeal any court action in the name of the Commission for the purpose of enforcing the laws subject to its jurisdiction, through its own legal representative with the concurrence of the Attorney General or through the Attorney General; and

(8) to delegate any of its functions or powers, other than the power to issue subpenas under pararaph (3), to any officer or employee of the Commission.

(c) Any United States district court within the jurisdiction of which any inquiry is carried on, may, upon petition by the Commission with the concurrence of the Attorney General or by the Attorney General, in case of refusal to obey a subpena or order of the Commission issued under subsection (b) of this section, issue an order requiring compliance therewith; and any failure to obey the order of the court may be punished by the court as a contempt thereof.

(d) No person shall be subject to civil liability to any person (other than the Commission or the United States) for disclosing information at the request of the Commission.

(e) The Commission may by rule require any manufacturer of consumer products to provide to the Commission such performance and technical data related to performance and safety as may be required to carry out the purposes of this Act, and to give such notification of such performance and technical data at the time of original purchase to prospective purchasers and to the first purchaser of such product for purposes other than resale, as it determines necessary to carry out the purposes of this Act.

(f) For purposes of carrying out this Act, the Commission may purchase any consumer product and it may require any manufacturer, distributor, or retailer of a consumer product to sell the product to the Commission at manufacturer's, distributor's, or retailer's cost.

(g) The Commission is authorized to enter into contracts with governmental entities, private organizations, or individuals for the conduct of activities authorized by this Act.

(h) The Commission may plan, construct, and operate a facility or facilities suitable for research, development, and testing of consumer products in order to carry out this Act.

(i)(1) Each recipient of assistance under this Act pursuant to grants or contracts entered into under other than competitive bidding procedures shall keep such records as the Commission by rule shall prescribe, including records which fully disclose the amount and disposition by such recipient of the proceeds of such assistance, the total cost of the project undertaken in connection with which such assistance is given or used, and the amount of that portion of the cost of the project or undertaking supplied by other sources, and such other records as will facilitate an effective audit.

(2) The Commission and the Comptroller General of the United States, or their duly authorized representatives, shall have access for the purpose of audit and examination to any books, documents, papers, and records of the recipients that are pertinent to the grants or contracts entered into under this Act under other than competitive bidding procedures.

(j) The Commission shall prepare and submit to the President and the Congress on or before October 1 of each year a comprehensive report on the administration of this Act for the preceding fiscal year. Such report shall include—

(1) a thorough appraisal, including statistical analyses, estimates, and long-term projections, of the incidence of injury and effects to the population resulting from consumer products, with a breakdown, insofar as practicable, among the various sources of such injury;

(2) a list of consumer product safety rules prescribed or in effect during such year;

(3) an evaluation of the degree of observance of consumer product safety rules, including a list of enforcement actions, court decisions, and compromises of alleged violations, by location and company name;

(4) a summary of outstanding problems confronting the administration of this Act in order of priority;

(5) an analysis and evaluation of public and private consumer product safety research activities;

(6) a list, with a brief statement of the issues, of completed or pending judicial actions under this Act;

(7) the extent to which technical information was disseminated to the scientific and commercial communities and consumer information was made available to the public;

(8) the extent of cooperation between Commission officials and representatives of industry and other interested parties in the implementation of this Act, including a log or summary of meetings held between Commission officials and representatives of industry and other interested parties;

(9) an appraisal of significant actions of State and local governments relating to the responsibilities of the Commission; and

(10) such recommendations for additional legislation as the Commission deems necessary to carry out the purposes of this Act.

(k)(1) Whenever the Commission submits any budget estimate or request to the President or the Office of Management and Budget, it shall concurrently transmit a copy of that estimate or request to the Congress.

(2) Whenever the Commission submits any legislative recommendations, or testimony, or comments on legislation to the President or the Office of Management and Budget, it shall concurrently transmit a copy thereof to the Congress. No officer or agency of the United States shall have any authority to require the Commission to submit its legislative recommendations, or testimony, or comments on legislation, to any officer or agency of the United States for approval, comments, or review, prior to the submission of such recommendations, testimony, or comments to the Congress.

PRODUCT SAFETY ADVISORY COUNCIL

Sec. 28. (a) The Commission shall establish a Product Safety Advisory Council which it may consult before prescribing a consumer product safety rule or taking other action under this Act. The Council shall be appointed by the Commission and shall be composed of fifteen members, each of whom shall be qualified by training and experience in one or more of the fields applicable to the safety of products within the jurisdiction of the Commission. The Council shall be constituted as follows:

(1) five members shall be selected from governmental agencies including Federal, State, and local governments;

(2) five members shall be selected from consumer product industries including at least one representative of small business; and

(3) five members shall be selected from among consumer organizations, community organizations, and recognized consumer leaders.

(b) The Council shall meet at the call of the Commission, but not less often than four times during each calendar year.

(c) The Council may propose consumer product safety rules to the Commission for its consideration and may function through subcommittees of its members. All proceedings of the Council shall be public and a record of each proceeding shall be available for public inspection.

(d) Members of the Council who are not officers or employees of the United States shall, while attending meetings or conferences of the Council or while otherwise engaged in the business of the Council, be entitled to receive compensation at a rate fixed by the Commission, not exceeding the daily equivalent of the annual rate of basic pay in effect for grade GS–18 of the General Schedule, including traveltime, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, United States Code. Payments under this subsection shall not render members of the Council officers or employees of the United States for any purpose.

COOPERATION WITH STATES AND WITH OTHER FEDERAL AGENCIES

Sec. 29. (a) The Commission shall establish a program to promote Federal-State cooperation for the purposes of carrying out this Act. In implementing such program the Commission may—

(1) accept from any State or local authorities engaged in activities relating to health, safety, or consumer protection assistance in such functions as injury data collection, investigation, and educational programs, as well as other assistance in the administration and enforcement of this Act which such States or localities may be able and willing to provide and, if so agreed, may pay in advance or otherwise for the reasonable cost of such assistance, and

(2) commission any qualified officer or employee of any State or local agency as an officer of the Commission for the purpose of conducting examinations, investigations, and inspections.

(b) In determining whether such proposed State and local programs are appropriate in implementing the purposes of this Act, the Commission shall give favorable consideration to programs which establish separate State and local agencies to consolidate functions relating to product safety and other consumer protection activities.

(c) The Commission may obtain from any Federal department or agency such statistics, data, program reports, and other materials as it may deem necessary to carry out its functions under this Act. Each such department or agency may cooperate with the Commission and, to the extent permitted by law, furnish such materials to it. The Commission and the heads of other departments and agencies engaged in administering programs related to product safety shall, to the maximum extent practicable, cooperate and consult in order to insure fully coordinated efforts.

(d) The Commission shall, to the maximum extent practicable, utilize the resources and facilities of the National Bureau of Standards, on a reimbursable basis, to perform research and analyses related to risks of injury associated with consumer products (including fire and flammability risks), to develop test methods, to conduct studies and investigations, and to provide technical advice and assistance in connection with the functions of the Commission.

TRANSFERS OF FUNCTIONS

Sec. 30. (a) The functions of the Secretary of Health, Education and Welfare under the Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) and the Poison Prevention Packaging Act of 1970 are transferred to the Commission. The functions of the Administrator of the Environmental Protection Agency and of the Secretary of Health, Education, and Welfare under the Acts amended by subsections (b) through (f) of section 7 of the Poison Prevention Packaging Act of 1970, to the extent such functions relate to the administration and enforcement of the Poison Prevention mission under the Federal Trade Commission Act, to the extent such functions relate to the administration and enforcement of the Flammable Fabrics Act, are transferred to the Commission.

(c) The functions of the Secretary of Commerce and the Federal Trade Commission under the Act of August 2, 1956 (15 U.S.C. 1211) are transferred to the Commission.

(d) A risk of injury which is associated with consumer products and which could be eliminated or reduced to a sufficient extent by action taken under the Federal Hazardous Substances Act, the Poison Prevention Packaging Act of 1970, or the Flammable Fabrics Act may be regulated by the Commission only in accordance with the provisions of those Acts.

(e)(1)(A) All personnel, property, records, obligations, and commitments, which are used primarily with respect to any function transferred under the provisions of subsections (a), (b) and (c) of this section shall be transferred to the Commission, except those associated with fire and flammability research in the National Bureau of Standards. The transfer of personnel pursuant to this paragraph shall be without reduction in classification or compensation for one year after such transfer, except that the Chairman of the Commission shall have full authority to assign personnel during such one-year period in order to efficiently carry out functions transferred to the Commission under this section.

(B) Any commissioned officer of the Public Health Service who upon the day before the effective date of this section, is serving as such officer primarily in the performance of functions transferred by this Act to the Commission, may, if such officer so elects, acquire competitive status and be transferred to a competitive position in the Commission subject to subparagraph (A) of this paragraph under the terms prescribed in pargaraphs (3) through (8)(A) of section 15(b) of the Clean Air Amendments of 1970 (84 Stat. 1676; 42 U.S.C. 215 nt).

(2) All orders, determination, rules, regulations, permits, contracts, certificates, licenses, and privileges (A) which have been issued, made, granted, or allowed to become effective in the exercise of functions which are transferred under this section by any department or agency, any functions of which are transferred by this section, and (B) which are in effect at the time this section takes effect, shall continue in effect according to their terms until modified, terminated, superseded, set aside, or repealed by the Commission, by Packaging Act of 1970, are transferred to the Commission.

(b) The functions of the Secretary of Health, Education, and Welfare, the Secretary of Commerce, and the Federal Trade Commission under the Flammable Fabrics Act (15 U.S.C. 1191 et seq.) are transferred to the Commission. The functions of the Federal Trade Com-

any court of competent jurisdiction, or by operation of law.

(3) The provisions of this section shall not affect any proceedings pending at the time this section takes effect before any department or agency, functions of which are transferred by this section; except that such proceedings, to the extent that they relate to functions so transferred, shall be continued before the Commission. Orders shall be issued in such proceedings, appeals shall be taken therefrom, and payments shall be made pursuant to such orders, as if this section had not been enacted; and orders issued in any such proceedings shall continue in effect until modified, terminated, superseded, or repealed by the Commission, by a court of competent jurisdiction, or by operation of law.

(4) The provisions of this section shall not affect suits commenced prior to the date this section takes effect and in all such suits proceedings shall be had, appeals taken, and judgments rendered, in the same manner and effect as if this section had not been enacted; except that if before the date on which this section takes effect, any department or agency (or officer thereof in his official capacity) is a party to a suit involving functions transferred to the Commission, then such suit shall be continued by the Commission. No cause of action, and no suit, action, or other proceeding, by or against any department or agency (or officer thereof in his official capacity) functions of which are transferred by this section, shall abate by reason of the enactment of this section. Causes of actions, suits, actions, or other proceedings may be asserted by or against the United States or the Commission as may be appropriate and, in any litigation pending when this section takes effect, the court may at any time, on its own motion or that of any party, enter an order which will give effect to the provisions of this paragraph.

(f) For purposes of this section, (1) the term "function" includes power and duty, and (2) the transfer of a function, under any provision of law, of an agency or the head of a department shall also be a transfer of all functions under such law which are exercised by any office or officer of such agency or department.

LIMITATION ON JURISDICTION

Sec. 31. The Commission shall have no authority under this Act to regulate any risk of injury associated with a consumer product if such risk could be eliminated or reduced to a sufficient extent by actions taken under the Occupational Safety and Health Act of 1970; the Atomic Energy Act of 1954; or the Clean Air Act. The Commission shall have no authority under this Act to regulate any risk of injury associated with electronic product radiation emitted from an electronic product (as such terms are defined by sections 355 (1) and (2) of the Public Health Service Act) if such risk of injury may be subjected to regulation under subpart 3 of part F of title III of the Public Health Service Act.

AUTHORIZATION OF APPROPRIATIONS

Sec. 32. (a) There are hereby authorized to be appropriated for the purpose of carrying out the provisions of this Act (other than the provisions of section 27(h) which authorize the planning and construction of research, development, and testing facilities), and for the purpose of carrying out the functions, powers, and duties transferred to the Commission under section 30, not to exceed—

(1) $55,000,000 for the fiscal year ending June 30, 1973;

(2) $59,000,000 for the fiscal year ending June 30, 1974; and

(3) $64,000,000 for the fiscal year ending June 30, 1975.

(b)(1) There are authorized to be appropriated such sums as may be necessary for the planning and construction of research, development and testing facilities described in section 27 (h); except that no appropriation shall be made for any such planning or construction involving an expenditure in excess of $100,000 if such planning or construction has not been approved by resolutions adopted in substantially the same form by the Committee on Interstate and Foreign Commerce of the House of Representatives, and by the Committee on Commerce of the Senate. For the purpose of securing consideration of such approval the Commission shall transmit to Congress a prospectus of the proposed facility including (but not limited to)—

(A) a brief description of the facility to be planned or constructed;

(B) the location of the facility, and an estimate of the maximum cost of the facility;

(C) a statement of those agencies, private and public, which will use such facility, together with the contribution to be made by each such agency toward the cost of such facility; and

(D) a statement of justification of the need for such facility.

(2) The estimated maximum cost of any facility approved under this subsection as set forth in the prospectus may be increased by the amount equal to the percentage increase, if any, as determined by the Commission, in construction costs, from the date of the transmittal of such prospectus to Congress, but in no event shall the increase authorized by this paragraph exceed 10 per centum of such estimated maximum cost.

SEPARABILITY

Sec. 33. If any provision of this Act, or the application of such provision to any person or circumstance, shall be held invalid, the reminder of this Act, or the application of such provisions to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

EFFECTIVE DATE

Sec. 34. This Act shall take effect on the sixtieth day following the date of its enactment, except—

(1) sections 4 and 32 shall take effect on the date of enactment of this Act, and

(2) section 30 shall take effect on the later of (A) 150 days after the date of enactment of this Act, or (B) the date on which at least three members of the Commission first take office.

Speaker of the House of Representatives.

Vice President of the United States and
President of the Senate.

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